180 185 190

Asn Arg Pro Ser Gly Ile Pro Val Arg Phe Ser Gly Ser Ser Ser Gly
195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Arg Ala Glu Asp Glu Gly 210 215 220

Val Tyr Tyr Cys Asn Tyr Arg Asp Ser Ser Gly Ala Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1457 <211> 245

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1457

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ \ 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \\ 90 \\ 95$ 

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly  $100 \\ 100 \\ 110$ 

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala  $130 \,$   $135 \,$   $140 \,$ 

Ser Gly Thr Pro Gly Gln Arg Val Ala Ile Ser Cys Ser Gly Ser Ser 155 160 145 Tyr Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly 165 170 175 Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly 180 185 Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu 200 Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 220 Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys 230 235 Leu Thr Val Leu Gly 245 <210> 1458 <211> 260 <212> PRT <213> Homo sapiens Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 5 10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Tyr 25 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Gly Ile Ser Gly Asn Ala Gly Ser Asn Lys Tyr Tyr Ala Asp Ser 50 Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu 65 70 Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr 85 90 Cvs Ala Arg Asp Tvr Pro Gly Ser Glu Tvr Asp Ile Leu Thr Gly Tvr 1707

100 105 110

Leu Phe Gly Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr  $115 \,$   $120 \,$   $125 \,$ 

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 130 135 140

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser 145 \$150\$

Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Ser 165  $170\,$  175

Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala 180 185 190

Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile 195 200 205

Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val

Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser 225 230 235 240

Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu 245 250 250

Thr Val Leu Gly 260

<210> 1459 <211> 251 <212> PRT

<213> Homo sapiens

Club 1459
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1
5
10
15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Thr Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly	Ile 50	Ίle	Asn	Pro	Ser	Gly 55	Gly	Ser	Thr	Asn	Tyr 60	Ala	Gln	Lys	Phe
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Arg	Asp	Thr	Ser 75	Thr	Gly	Thr	Val	Tyr 80
Met	Glu	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Leu	Tyr	Tyr 95	Cys
Ala	Arg	Ala	Thr 100	Tyr	Asp	Pro	Leu	Thr 105	G1y	Tyr	Ser	Phe	Asp 110	Gly	Phe
Asp	Ile	Trp 115	Gly	Gln	Gly	Thr	Met 120	Val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Gln	Ser	Val	Leu
Thr 145	Gln	Pro	Ala	Ser	Val 150	Ser	Gly	Ser	Pro	Gly 155	Gln	Ser	Ile	Thr	Ile 160
Ser	Cys	Thr	Gly	Thr 165	Ser	Ser	Asp	Val	Gly 170	Gly	Tyr	Asn	Tyr	Val 175	Ser
Trp	Tyr	Gln	Gln 180	His	Pro	Gly	Lys	Ala 185	Pro	Lys	Leu	Met	Ile 190	Tyr	Glu
Gly	Ser	Lys 195	Arg	Prò	Ser	Gly	Val 200	Ser	Asn	Arg	Phe	Ser 205	Gly	Ser	Lys
Ser	Gly 210		Thr	Ala	Ser	Leu 215	Thr	Ile	Ser	Gly	Leu 220	Gln	Ala	Glu	Asp
Glu 225	Ala	Asp	Tyr	Tyr	Cys 230	Ser	Ser	Tyr	Thr	Thr 235	Arg	Ser	Thr	Arg	Val 240
Phe	Gly	Gly	Gly	Thr 245	Lys	Leu	Thr	Va1	Leu 250	Gly					

<210> 1460

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1460

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Glu Pro Gly Ser

1 5 10 15

Ser Val Thr Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Arg Thr Ala 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile \$35\$

Gly Gly Ile Ile Pro Ile Leu Gly Pro Pro Asn Tyr Ala Gln Ile Leu 50 55 60

Lys Gly Arg Leu Thr Ile Thr Ala Asp Glu Leu Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Ala Arg Arg Val Gly Val Leu Gly Gly Lys Asn Ala Phe Glu 100 105 110

Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 135 ·140

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 150 155 160

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp \$165\$ \$170\$ \$175\$

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly  $180 \,$   $185 \,$   $190 \,$ 

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195  $200\,$ 

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225 230 235 240

Gly Gly Gly Thr Glu Leu Thr Val Leu Gly

245 250

<210> 1461 <211> 250 <212> PRT

<213> Homo sapiens

<400> 1461

Gln Val Gln Leu Val Gln Thr Gly Gly Gly Val Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr . 20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Tyr Ser Val $50 \\ 60$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln His Asp Ile Leu Thr Gly Gly Tyr Tyr Gly Met Asp 100 105 110

Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr

Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser 145 150 155 160

Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr 165 170 175

Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp 180 185 190

Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly 195 200 205

Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala 215 220 210 Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe 235 . 240 230 Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1462 <211> 252 <212> PRT <213> Homo sapiens <400> 1462 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1.0 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 55 Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 Asp Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 1712

165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp  $210 \hspace{1.5cm} 215 \hspace{1.5cm} 220 \hspace{1.5cm}$ 

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1463

<211> 256 <212> PRT

<213> Homo sapiens

<213> NOMO Sapien

<220> <221> Site

<222> \$100

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> Site <222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> Site

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1463

Arg Val Gln Cys Gln Lys Ser Gly Gly Gly Leu Val Gln Pro Gly Arg 1 5 10 15

Ser Arg Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Lys Asn Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Asp Val His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val \$35\$

Xaa Arg Thr Arg Xaa Xaa Ala Asn Ser Tyr Thr Thr Glu Tyr Ala Ala 50 55 60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Ser 70 75 65 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr 85 9.0 Tyr Cys Ala Arg Glu Gly Thr Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr 105 100 Pro Leu Gly Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val 120 125 115 Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 135 140 130 Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly 145 150 155 160 Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser 165 170 Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu 180 Leu Ile Tvr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe 200 205 195 Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1464 <211> 245 <212> PRT <213> Homo sapiens <400> 1464

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 1.0

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr  $65 \phantom{000}70\phantom{000}75\phantom{000}75$ 

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Gln Gly 100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115.

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala  $130\,$ 

Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly \$165\$

Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly 180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

 Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys

 225
 230
 235
 240

Leu Thr Val Leu Gly 245

<210> 1465 <211> 248

<212> PRT <213> Homo sapiens

 $<\!400>$  1465 Glu Val Gln Leu Val Glu Thr Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Ile Phe Ser Ser Asn 20 25 30

Gly Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Ala Ile Ile Pro Met Phe Lys Thr Ala His Tyr Ala Gln Asn Phe  $50 \hspace{1.5cm} 60$ 

Gln Gly Arg Val Thr Ile Asn Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Gly Ser Ser Gln Asm Phe Tyr Gly Met Asp Val Trp Gly 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro  $130 \ \ 140 \ \$ 

Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser 145 \$150\$

Gly Thr Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln 165  $$170\$ 

Phe Pro Gly Ala Ala Pro Lys Leu Leu Ile Tyr Asp Asn Gly Lys Arg  $180 \ 185 \ 190$ 

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser 195 200 205

Ala Thr Leu Ala Ile Ala Gly Leu Gln Thr Gly Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Gly Thr Trp Asp Ser Ser Leu Ser Ala Val Val Phe Gly Gly 225 230 . 235

Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1466

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1466

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met \$35\$

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Gly Thr Gly Tyr Asp IIe Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \ \ \, 105 \ \ \, 110$ 

Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115  $$\rm 125$ 

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Thr 145 150 155 160

Val Thr Ile Ser Cys Ser Gly Gly Gly Thr Asn Ile Gly Arg Asp Arg 165 170 175

Val Thr Trp Tyr Gln Gln Val Pro Gly Thr Pro Pro Lys Leu Leu Ile 180 185 190

Tyr Lys Thr Ser Gln Arg Pro Ser Arg Val Pro Asp Arg Phe Ser Ala 195 200 205

Ser Lys Ser Gly Thr Ser Ala Ser Leu Asp Ile Ser Gly Leu Arg Ser 210 . 215 . 220

Glu Asp Glu Ala Asp Tyr Tyr Cys Val Val Trp Asp Asp Ser Leu Arg 225 230 235 240

Gly Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly  $245 \\ 250$ 

<210> 1467

<211> 252

<212> PRT <213> Homo sapiens

 $<\!400>1467$  Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Thr Phe Ser Arg Ser 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gln Gly Arg Val Ile Leu Thr Ala Asp Glu Leu Thr Thr Thr Ala Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Gly Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Arg Gly Val Val Trp Val Ala Tyr Gly Asp Val Gly Ile Tyr Gly  $100 \\ 0.05$ 

Phe Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Gln Ser  $130 \ \ 135 \ \ 140 \ \ .$ 

Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145  $$150\$ 

Thr Ile Ser Cys Thr Gly Ser Ser Thr Asp Leu Gly Asp Tyr Ser Ser 165 \$170\$

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Ile Ile 180 185 190

Tyr Asp Val Asn Asn Arg Pro Ser Gly Val Ser Asp Arg Phe Ser Gly
195 200 205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Ala Leu Gln Ala 210 225 220

Asp Asp Glu Ala Asp Tyr His Cys Gly Ser Tyr Thr Asp His Leu Thr 225 230 235

Arg Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ \,$ 

<210> 1468

<211> 251

<212> PRT <213> Homo sapiens

<400> 1468

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Phe Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Arg Ile Ile Pro Asp Phe Glu Thr Thr Tyr Tyr Ser Gln Lys Leu  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Gln Asp Arg Val Thr Met Thr Ala Asp Thr Cys Thr Ser Thr Ser Tyr 65 70 75 80

Met Glu Leu Asn Ser Leu Arg Ser Asp Asp Thr Ala Ile Tyr Tyr Cys

Ala Arg His Asp Tyr Tyr Ile Met Thr Ala Ala His Tyr Tyr Tyr Asp 100 105 110

Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Ser Glu 130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 150 155 160

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr  $165 \\ 170 \\ 175$ 

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn 180 185 190

Ser Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Ile His Leu Gly Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1469

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1469

Gln Val Gln Leu Val Gln Ser Gly Pro Asp Val Lys Asn Pro Gly Ala 1 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Leu Asn Tyr 20 25 30

Asp Ile Asn Trp Val Arg Gln Thr Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Met Asn Pro Lys Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe  $50 \ \ 55 \ \ \ 60$ 

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asn Thr Val Tyr 65 ' 70 75 80

Met Glu Leu Ser Arg Leu Ser Ser Asp Asp Thr Ala Val Tyr Phe Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Pro Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg 145  $$150\$ 

Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr 165 170 175

Val Tyr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile 180 185 190

Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 195  $200\,$ 

Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Gly Ser Leu Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$  240

Gly Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ \,$ 

<210> 1470

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1470 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
50
60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 90

Ala Arg Asp Phe Tyr Asp Ile Leu Thr Gly Tyr His Asp Ala Phe Asp  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln  $130 \,$   $135 \,$   $140 \,$ 

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys  $145 \hspace{1.5cm} 150 \hspace{1.5cm} 155 \hspace{1.5cm} 160 \hspace{1.5cm}$ 

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys \$165\$

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 \$215\$

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Thr Lys Leu Thr Val Leu Gly

<210> 1471 <211> 250

<212> PRT <213> Homo sapiens

<400> 1471 Gln Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1  $\phantom{0}$  15  $\phantom{0}$  10  $\phantom{0}$  15

Ser Leu Arg Leu Ser Cys Ala Ala Pro Gly Phe Thr Phe Ser Asn Ala 20 25 30

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Pro Nal Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr 65 70 75 80

Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Asp Val Tyr \$85\$ 90 95

Tyr Cys Thr Thr Asp Val Asp Asp Ile Leu Thr Gly Tyr Ser Trp Asp  $100 \\ 05 \\ 110$ 

Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr  $\cdot$  130  $\cdot$  135  $\cdot$  140

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145  $$150\ _{\odot}$$ 

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly  $180 \ \ \, 185 \ \ \, 190$ 

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195  $200 \ \ 205$ 

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu  $210 \\ 215 \\ 220$ 

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 235 230 225

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly . 245

<210> 1472

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1472

Gin Val Gin Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 1.0 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 2.0 25

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 35

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 135 130

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 1.55 150

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165 . 170

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 1.85

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr  $195 \hspace{0.5cm} 200 \hspace{0.5cm} 200 \hspace{0.5cm}$ 

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1473 <211> 251

<211> 251 <212> PRT .

<213> Homo sapiens

<400> 1473

Gin Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{65}$   $^{70}$   $^{75}$   $^{80}$  80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \ \ 105 \ \ \ 110$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 155 150 145 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly His Asn Tyr Val Ser 170 165 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 185 180 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 200 195 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Lys Asp 210 215 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 235 225 230 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1474 <211> 250 <212> PRT <213> Homo sapiens

<400> 1474 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1.5 5 10

Ser Leu Arg Leu Ser Cys Lys Gly Ser Gly Tyr Ser Phe Ser Arg Tyr 20

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Gly Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Asn Phe

Gln Gly Arg Ala Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr

Met Glu Leu Arg Gly Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 8.5

Ala Arg Asp Met His Tyr Asp Ile Leu Thr Gly Tyr Tyr Thr Gly Leu 100 105

Ala Phe Asp Met Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu  $130 \,$   $135 \,$   $140 \,$ 

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}$ 

Ile Thr Cys Glu Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr 165 \$170\$

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Thr Tyr Gly Lys Asn 180 . 185 . 190

Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe 225 230 235

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1475

<211> 252

<212> PRT

<213> Homo sapiens

<220>

<221> Site <222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> Site <222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

... ....

Gln Val Gln Leu Gly Ala Val Leu Gly Ala Lys Val Lys Lys Pro Gly

Tyr Thr Val Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp 40 3.5 Met Gly Arg Ile Asn Pro Met Ser Asn Gly Ala Asn Tyr Ala Gln Lys 50 Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala 70 75 Tyr Leu Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr 85 90 Cys Ala Arg Gly Gly Tyr Asp Ile Leu Thr Gln Tyr Pro Ala Glu Phe 100 105 110 Phe His Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125 Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser 135 140 Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Thr Ile Thr Cys Gln Gly Asp Ser Val Arg Asn Phe Tyr Ala Ser 165 170 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Ile Tyr Gly 185 180 Gln Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Arg 195 200 Ser Glv Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu As 210 215 220

Glu Gly Val Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Thr Asn Pro Val 225 230 235

Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1476 <211> 248

<212> PRT <213> Homo sapiens

<400> 1476 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Ser 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu 35 40 45

Gly Gly Ile Ile Pro Ile Ser Asn Ser Pro Val Tyr Ala Gln Lys Phe 50 60

Gln Asp Arg Val Thr IIe Thr Ala Asp Arg Leu Thr Thr Thr Ala Phe 65 70 75 80

Leu Glu Leu Thr Gly Leu Lys His Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Arg Asp Phe Gly Val Ile Gly Asp Tyr Arg Pro Phe Asp Tyr Trp \$100\$

Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro 130 135 140

Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr 145 \$150\$

Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln 165 170 175

Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys 180 185 190

Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp 210  $\phantom{-}215\phantom{+}\phantom{0}$  220  $\phantom{-}\phantom{0}\phantom{0}$ 

Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1477

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1477

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Leu Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Ser Ser Phe Ser Asp Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Glu Thr Val Pro Ile Leu Gly Thr Gln Thr Tyr Ala Gln Lys Phe
50 60

Gln Gly Arg Val Thr Ile Ser Ala Asp Glu Leu Thr Arg Thr Thr Phe  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Ser Ser Asn Pro Val Tyr Gly Leu Asp Val Trp Gly Arg Gly  $100 \\ 105 \\ 110$ 

Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala 130 135 140

Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 150 160

Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly  $165 \\ 170 \\ 175$ 

Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly 180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu
195 200 205

Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly 245

<210> 1478

<211> 251 <212> PRT

<213> Homo sapiens .

 $<\!400\!>$  1478 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Ser Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 175 165 170 170

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1479

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1479

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 \$135\$

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 150 155 160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu
- 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1480 <211> 250

<212> PRT

<213> Homo sapiens

<400> 1480

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Asp Asn Tyr 20  $\phantom{-}25\phantom{0}$  .

Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ 40 \ 45$ 

Gly Trp Ile Ser Ala Tyr Asp Gly Asp Arg Asn Tyr Ala Gln Lys Leu 50 55 60

Arg Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 Met Glu Leu Arg Ser Leu Arg Pro Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 9.5 Ala Arg Asp Asp Arg Asp Ile Leu Thr Asn Tyr Tyr Leu Glu Tyr Phe 105 100 Gln His Tro Glv Lvs Glv Thr Leu Val Thr Val Ser Ser Gly Gly Gly 125 120 115 Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val 130 135 140 Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala Ser 145 150 155 160 Ile Thr Cys Ser Gly His Asn Leu Gly Asp Lys Tyr Val Ser Trp Tyr 170 175 165 Gln Gln Lys Pro Gly Gln Ser Pro Val Leu Val Ile Tyr Gln Asp Thr 180 185 190 Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser Asn Ser Gly 200 Asn Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met Asp Glu Ala 215 Asp Tyr Ser Cys Gln Thr Trp Asp Gly Ser Thr Ser Ser Val Val Phe 235 240 230 Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1481 <211> 259 <212> PRT <213> Homo sapiens

 $<\!400>$  1481 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 . 5 . 10 . 15

Ser Val Lys Val Ser Cys Arg Val Ser Gly Gly Ser Phe Thr Asp Asp 20 25 30

Ser Ile Asn Trp Leu Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val \$35\$

Gly Gly Thr Ile Pro Leu Ala Asn Arg Ala Asn Tyr Ala Gln Lys Phe-

Arg Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Ala Thr Val Phe 65 70 75 80

Leu Glu Leu Thr Ser Leu Arg Ser Asp Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ser Ser Pro Pro Lys Trp Tyr Asp Ala Leu Thr Gly Asp Ser 100 105 110

Ser Tyr His Ser Ala Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr 115 · 120 125

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 130 135

Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr 145 \$150\$

Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile \$165\$

Lys Leu Leu Ile Phe Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Ala 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser 210  $\,$  215  $\,$  220  $\,$ 

Asp Ser Leu Asn Gly His Trp Val Phe Gly Gly Gly Thr Lys Leu Thr 245 250 255

Val Leu Gly

<210> 1482

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1482

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr  $\phantom{-}20\phantom{+}25\phantom{+}$ 

Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Arg Ile Val Pro Ile Leu Gly Arg Thr Asn Tyr Ala Gln Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95 \hspace{0.5cm}$ 

Ala Arg Asp Lys Thr Leu Gly Asp Gln Leu Val Glu Ala Tyr Tyr Tyr 100 105 110

Asp Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala 130 135 140

Leu Ser Ser Glu Leu Thr Gln Asp Pro Thr Val Ser Val Ala Leu Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Thr Thr Tyr Tyr 165 170 175

Gly Ser Trp Tyr Gln His Lys Pro Gly Gln Ala Pro Val Leu Val Ile 180  $$185\$ 

Phe Gly Asn Asn Asn Arg Pro Ser Arg Ile Pro Asp Arg Phe Ser Gly 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Ser Arg Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala 210 215 220

Glu Asp Glu Ala Asp Tyr Tyr Cys His Ser Arg Asp Asn Ser Asp Asn 225 230 235 240

Asp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1483

<211> 255

<212> PRT

<213> Homo sapiens

<400> 1483

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Asn Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Ser His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Thr Phe Ala Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Gly Ile Ile Pro Met Phe Asp Thr Ala Val Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Ser  $65 \\ 70 \\ 75 \\ 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95 \hspace{1cm} .$ 

Ala Lys Leu Gly Arg Thr Ser Arg Asp Leu Leu Thr Gly Tyr His Phe 100 105 110

Tyr Asn Met Asp Val Trp.Gly Arg Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala 130 135 140

Leu Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Gly Ser Tyr 165 170 175

. 1737

Ala Asn Trp Tyr Arg Gln Lys Pro Gly Gln Ala Pro Val Leu Val Met 180 185 190

Tyr Gly Arg Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly 195  $200\,$  205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala 210  $\phantom{\bigg|}215\phantom{\bigg|}$  220

Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn 225 230 235 240

Pro Asp Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250 250

<210> 1484

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1484

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25 30

Gly Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 . 45

Gly Arg Val Val Pro Gly Phe Glu Thr Thr Asn Tyr Ser Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Trp Thr Ala Thr Ser Tyr 65 70 75 80

Met Glu Leu Asn Gly Leu Arg Ser Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Ala Arg Asp Asp Tyr Asp Ile Leu Thr Gly Ser Leu Tyr Tyr Phe Asp 100 105 110

Ser Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Ser Glu
130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 150 150 155

Ile Thr Cys Gln Gly Asp Asn Leu Arg Thr Tyr Pro Pro Thr Trp Tyr  $_{165}$   $_{170}$   $_{170}$   $_{175}$ 

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn  $180\,$ 

Asn Arg Pro Leu Gly Ile Pro Asp Arg Phe Ser Gly Phe Asn Ser Gly 195  $200\,$ 

Asn Thr Ala Ser Leu Thr Ile Ser Gly Ala Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Ser Ser Arg Asp Tyr Ser Gly Asn Gln Val Ile Phe 225 230 235 240

<210> 1485

<211> 259 <212> PRT

<213> Homo sapiens

<400> 1485

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe 50 60

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Asp Tyr Tyr Cys 85 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser 105 100

Ala Phe Asp Gln. Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 135 . 140 130

Ala Val Leu Thr Gln Pro Ser Ser Leu Ser Ala Ser Pro Gly Ala Ser 145 150 155 160

Ala Ser Leu Thr Cys Thr Leu Arg Ser Asp Ile Asn Leu Glu Thr Ser 165 170 175

Arg Ile Tyr Trp Phe Gln Gln Lys Pro Gly Ser Pro Pro Arg Tyr Leu 180 185 190

Leu Arg Tyr Gln Ser Asp Ser Asp Asn His Leu Asp Ser Gly Val Pro 195 200 205

Ser Arg Phe Ser Gly Ser Lys Asp Ala Ser Ala Asn Ala Gly Ile Leu 210 215

Leu Ile Ser Gly Val Gln Ser Glu Asp Glu Ala Asp Tyr His Cys Met 235 225 230

Ile Trp His Ser Gly Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr 245 250

Val Leu Glv

<210> 1486

<211> 250

<212> PRT <213> Homo sapiens

<220>

<221> Site

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> .

<221> Site <222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids 1740

Gln Met Gln Leu Val Gln Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly 10 15 Ser Leu Arg Leu Ser Cys Lys Ala Ser Gly Leu Thr Phe Asn Ser His 20 25 Trp Met Ser Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Leu 35 Ala Asn Ile Xaa Gln Asp Gly Ser Glu Lys Tyr Tyr Met Asp Ser Val 50 55 60 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 Leu Gln Met Xaa Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys · 85 90 Val Arg Asp Arg Ala Asp Ile Leu Thr Gly Tyr Asn Asp Ala Phe Asp 100 105 Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125 Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu 130 135 140 Leu Thr Gln Asp Pro Ala Met Ser Val Ala Leu Gly Gln Thr Val Trp Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Ser Tyr Ala Ser Trp Tyr 165 . 170 Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Met Tyr Ala Lys Asn 180 185 Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 195 200 Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 215 Asp Tyr Tyr Cys Asp Ser Arg Asp Ser Ser Arg His His Val Met Phe

235 1741

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1487

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1487

Glu Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Fhe Ser Ser Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Ala Phe Asn Trp Val Arg Arg Ala Pro Gly Gln Gly Leu Glu Trp Leu  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Ser Ile Val Pro Val Phe Asn Thr Lys Thr Phe Ala Arg Lys Phe 50 60

Gln Gly Arg Val Thr Leu Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr  $65 \ 70 \ 75 \ 80$ 

Leu Glu Leu Ser Asn Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Ser Arg Tyr Gly Asp Pro Phe Tyr Tyr Tyr Tyr Tyr Met Asn Val

Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr 130 - 135 140

Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser 145 150 155

Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His Trp \$165\$

Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Leu Leu Ile His Thr Asn  $180 \hspace{1cm} 185 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Thr Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser

Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Arg Ser Leu Ser Ala Trp Val 225 230 235

Phe Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1488

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1488

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr  $65 \phantom{000}75\phantom{000}75$ 

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \hspace{0.25cm} 105 \hspace{0.25cm} 105$ 

Ala Phe Asp Gln Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu 130 135 140

Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln 145 150 . 155 160

Thr Ala Ser IÎe Thr Cys Ser Gly Asp Lys Leu Arg Asn Lys Tyr Ala  $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175 \hspace{1.5cm}$ 

Phe Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Ala Leu Ile Ile Tyr 180 185 190

Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser 195 200 205

Asp Glu Ala Val Tyr Tyr Cys Gln Thr Trp Asp Ser Ser Ala Gly Asn 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$  235

Ala Leu Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \hspace{1cm} 250 \hspace{1cm}$ 

<210> 1489

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1489

Gln Leu Gln Leu Gln Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asp Tyr 20 25 30

Ser Leu.His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Trp Ile Asn Pro Lys Ser Gly Ala Thr Asn Ser Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Val Tyr  $65 \hspace{1cm} 70 \hspace{1cm} 75 \hspace{1cm} 80$ 

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Ser Asn Asp Ile Leu Thr Gly Trp Gly Gly Tyr Asn Trp  $100 \\ 105 \\ 110$ 

Phe Asp Pro Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser 130 135 140

Val Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg Val 145 150 150 160

Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp \$165\$

Val His Trp Tyr Gln Gln Val Pro Gly Thr Ala Pro Lys Leu Leu Ile 180 185 190

Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala 210 \$215\$

Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Gly Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly  $245 \ \ \, 250 \ \ \,$ 

<210> 1490

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1490 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Gin Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 45

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr  $65 \ 70 \ 75 \ 80$ 

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser 100 105 110

Ala Phe Asp Gln Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly \$115\$ \$120\$ \$125\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu  $130 \,$   $135 \,$   $140 \,$ 

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145  $\phantom{00}$  150  $\phantom{00}$  155  $\phantom{00}$  160

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Asn Tyr Phe Ala 165 170 175

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Ile Ile Tyr 180 185 190

Gly Lys Thr Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 195 200 205

Arg Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Lys 210 215

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Arg Asp Ser Ser Gly Asn His 225 230 235

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1491 <211> 244

<212> PRT <213> Homo sapiens

<213> Homo saprem

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Thr Ser 130 135 140

Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser 145 \$150\$

Asn Ile Gly Ser Asn Tyr Val Tyr Trp Tyr Gln Gln Phe Pro Gly Thr \$150\$ . \$165\$

Ala Pro Lys Leu Leu Ile Asn Arg Asn Asn Gln Arg Pro Ser Gly Val

Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala  $195 \hspace{1.5cm} 200 \hspace{1.5cm} 205 \hspace{1.5cm}$ 

Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala 210 215 220

Trp Asp Asp Ser Leu Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Val Leu Gly

<210> 1492

<211> 247

<212> PRT <213> Homo sapiens

<400> 1492 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 -1.0 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 2.5 Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 55 60 Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu 100 105 110 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125 Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Arg Ser Gly Ser 150 Asn Ile Gly Ala Gly Asn Asp Val His Trp Tyr Gln Gln Phe Pro Gly 165 Thr Ala Pro Lys Leu Leu Ile Tyr Ala Asn Asn Asn Arg Pro Ser Gly 180 Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195 200 Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 220 215 Ser Tyr Asp Asn Arg Leu Ser Gly Gly Asp Val Val Phe Gly Gly Gly 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1493

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1493

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 40 45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95 \hspace{1.5cm}$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \,$ 

Met Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu 130 135 140

Thr Gln Pro Ser Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145  $$150\$ 

Ser Cys Ser Gly Ser Thr Ser Asn Ile Ala Thr Asn Ala Val Asn Trp 165 170 175

Tyr Gln Gln Leu Fro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser Asn  $$180\$ 

Thr Glu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu Ala Gly Gln Gly 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1494

<211> 257 <212> PRT

<213> Homo sapiens

<400> 1494

Gln Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Fro Gly Ala

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe 50 60

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Ser Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \ \ 105 \ \ \ 110$ 

Ala Phe Asp Gln Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg 145 155 160

Val Thr Ile Ser Cys Thr Gly Asn Ser Ser Asn Ile Gly Ala Gly Tyr \$165\$

Glu Val His Trp Tyr Gln Leu Val Pro Gly Thr Ala Pro Lys Leu Leu 180 \$180\$

Ile Tyr Gly Asn Thr Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser  $195 \hspace{0.5cm} 200 \hspace{0.5cm} 205 \hspace{0.5cm}$ 

Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln 210 220

Ala Glu Asp Glu Ala Asn Tyr Tyr Cys Gln Ser Tyr Asp Arg Ser Leu 225 230 235

Ser Gly Ser His Ala Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 245 250 255

Glv

<210> 1495

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1495 Glu Val Gln Leu Val Glu Thr Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Ser  $20 \\ 25 \\ 30$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly, Leu Glu Trp Met \$35\$

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 . 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $_{65}$   $_{70}$   $_{70}$ 

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Thr Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Ala Glu Tyr Phe  $100 \ \ 105 \ \ 110$ 

Gln His Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Ala Gln Ser Val 130 135 140

Val Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Arg Val Thr 145 150 155 160

Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ile Asn Ser Val Ser  $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175 \hspace{1.5cm}$ 

Asn Ser Asn Arg Pro Ser Gly Val Pro Gly Arg Phe Ser Gly Ser Lys  $195 \hspace{1cm} 200 \hspace{1cm} 205 \hspace{1cm} 205 \hspace{1cm}$ 

Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Asn Ser Leu Asn Gly Val  $225 \hspace{1cm} 230 \hspace{1cm} 235 \hspace{1cm} 235 \hspace{1cm} 240 \hspace{1cm}$ 

Leu Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser \$245\$

<210> 1496 <211> 251

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1496

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr 20 25 30

Ala Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met

Gly Trp Ile Asn Val Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Leu 50 60

Gln 65	Gly	Arg	Val	Thr	I1e 70	Thr	Arg	Asp	Ile	Ser 75	Ala	Ser	Thr	Ala	Tyr 80
Met	Glu	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Ser	Asp 100	Tyr	Āsp	Ile	Leu	Thr 105	Gly	Tyr	Tyr	Trp	Val 110	Pro	Ala
Val	Trp	Gly 115	Gln	Gly	Thr	Met	Val 120	Thr	Val	Ser	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130		Gly	Gly	Ser	Gly 135	Gly	Gly	Gly	Ser	Ala 140	Gln	Ser	Val	Leu
Thr 145		Pro	Pro	Ser	Ala 150	Ser	Gly	Ser	Pro	Gly 155	Gln	Ser	Val	Thr	Ile 160
Ser	Cys	Thr	Gly	Gly 165		Ser	Asp	Val	Gly 170	Gly	Tyr	Asn	Tyr	Val 175	Ser
Trp	Tyr	Gln	Gln 180		Pro	Gly	Lys	Ala 185	Pro	Lys	Leu	Ile	Val 190	Asn	Glu
Val	Asn	Lys 195	Arg	Pro	Ser	Gly	Val 200	Pro	Asp	Arg	Phe	Ser 205	Gly	Ser	Lys
Ser	Gl <sub>y</sub> 210		Thr	Ala	Ser	Leu 215		Val	Ser	Gly	Leu 220	Gln	Ala	Glu	Asp
Glu 225		a Asr	туг	Tyr	Cys 230	Ala	Ser	Tyr	Ala	Gly 235	Asn	Asr	Asr	val	Val 240
Pho	e Gly	/ Gl	/ Gly	7 Thr 245		Val	Thr	· Val	Leu 250	ı Gly	,				
<2: <2:	10> 3 11> 3 12> 1 13> 1	259 PRT	sap:	Lens											
G1:	00> : n Va	1497 1 Gl:	n Lei		l Glr	ı Sex	: Gly	/ Ala	Glu 10	ı Vai	l Ly:	в Ьу:	: Pr	o Gly	7 Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 25 20 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 45 35 40 Gly Gly Met Ile Pro Thr Phe Gly Thr Ala Ile Tyr Ala Gln Lys Phe 50 55 Gln Gly Arg Val Thr Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 7.0 75 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 Ala Arg Gly Arg Glu Asp Thr Asp Lys Val Lys Pro Trp Asp Arg Tyr 100 105 Phe His Tyr Tyr Tyr Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr 120 Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 135 Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile 165 170 Gly Ala Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala 180 185 Pro Lys Leu Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro 195 200 Asp Arg Phe Ser Gly Ser Arg Ser Gly Thr Ser Ala Ser Leu Ala Ile 215 210 Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr 230 235 Asp Ser Ser Leu Ser Gly Ser Val Phe Gly Gly Gly Thr Lys Val Thr

Val Leu Gly

<210> 1498

<211> 244 <212> PRT

<213> Homo sapiens

<400> 1498

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe  $65 \ 70 \ 75 \ 80$ 

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys . 85 90 95

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser 130 135 140

Gly Ala Pro Gly His Ser Val Thr Ile Ser Cys Ser Gly Ser Ser Ser 145 150 155 160

Asn Ile Gly Gly Asn Ser Val Tyr Trp Tyr Gln Gln Val Pro Gly Thr \$165\$

Ala Pro Lys Leu Leu Ile Tyr Asp Asn Gly Lys Arg Pro Ser Gly Ile

Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Thr Leu Ala 195 200 205

Trp Asp Ser Ser Leu Ser Ala Val Val Phe Gly Gly Gly Thr Lys Val 225 230 235

Thr Val Leu Glv

<210> 1499

<211> 253 <212> PRT

<213> Homo sapiens

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Val Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Met Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 , 45

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe
50 60

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 70 75 80

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser 100 105 110

Val Phe Asp Pro Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly \$115\$ \$120\$ \$125\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu 130 135 140

Glu Thr Thr Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Arg Asn Ser  $165 \ \ 170 \ \ 175 \ \ 175$ 

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu 180 185 190

Ile Tyr Gly A1a Ser Ser Arg A1a Thr Gly Ile Pro Asp Arg Phe Ser 195 200 205

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  $210 \,$   $\,$  215  $\,$  220

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro 225 \$230\$

Val Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg \$245\$

<210> 1500

<211> 252

<212> PRT <213> Homo sapiens

<400> 1500

Gln Vai Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ser Thr His  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Gly Ile Thr Trp Vai Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys 85 90 95

Ala Arg Ser Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr His Thr Pro Leu 100 105 110

Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Leu Pro Val 130 135 140

Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr 145  $$150\$ 

Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn  $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$ 

Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Arg  $_{\rm 195}$   $_{\rm 195}$   $_{\rm 200}$ 

Gln Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Ala Val 225  $230 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

<210> 1501 <211> 251

<211> 251 <212> PRT

<213> Homo sapiens

 $<\!400>1501$  Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5  $10^{\circ}$  15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 60

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \hspace{1.5cm} 100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Met Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu  $130 \ \ \, 140 \ \ \,$ 

Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145 150 155 160

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Gln Asn Tyr Val Ser Trp \$165\$

Tyr Gln Val Phe Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Ser  $180 \,\,$ 

His Arg Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala Ser Thr Ser 195 200 205

Ala Asp Tyr Phe Cys Gly Ala Trp Asp Ser Lys Leu Asn Ala Tyr Val $225 \hspace{1cm} 230 \hspace{1cm} 235 \hspace{1cm} 240 \hspace{1cm} \cdot$ 

Phe Gly Thr Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1502 <211> 253

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1502

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 . 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 45

Glu Gly Arg Val Ile Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \ \ \, 105 \ \ \, 110$ 

Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly  $\,\cdot\,$  115  $\,$  120  $\,$  125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu 130 135 140

Ser Tyr Val Leu Thr Gln Pro Pro Ser Leu Ser Val Ser Pro Gly Gln 145 \$150\$

Thr Ala Ser Ile Thr Cys Ser Gly Asp Lys Leu Gly Asp Lys Tyr Val  $165 \\ 170 \\ 175$ 

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Val Met Val Ile Tyr 180 185 190

Gln Asp Arg Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser 195 200 205

Asn Ser Gly Asn Ala Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met 210 \$210\$

Asp Glu Ala Glu Tyr Tyr Cys Gln Ala Trp Asp Ar<br/>ģ Thr Thr Ala Asp 225 230 235 240

Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<sup>~&</sup>lt;210≻ 1503

<sup>&</sup>lt;211> 261

<sup>&</sup>lt;212> PRT <213> Homo sapiens

<sup>&</sup>lt;400> 1503

Glu Val Gln Leu Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro 1.5 1.0 5 Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser 25 20 Asn Phe Asp Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu 35 40 45 Trp Val Ala Val Ile Ser Tyr Asn Gly Arg Thr Lys Tyr Tyr Leu Asp 50 55 60 Ser Val Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ser Lys His Thr Val Asp Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr . 85 90 Tyr Cys Ala Lys Gly Gly Gly Tyr Asp Ile Leu Thr Gly Tyr Ser Tyr 100 105 Pro Tyr Leu Tyr Tyr Gly Leu Asp Val Trp Gly Arg Gly Thr Met Val 120 125 Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 135 Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser 170 165 Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln Val Pro Gly Thr 185 Ala Pro Lys Leu Leu Ile Tyr Ser Asn Ser His Arg Ser Ser Gly Val 200 195 Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 215 Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Ala Tyr Tyr Cys Glu Ser 235

Arg Asp Asp Ser Leu Asn Gly Asn Val Val Phe Gly Gly Gly Thr Lys 245 250 255

Leu Thr Val Leu Gly 260

<210> 1504

<211> 255 <212> PRT

<213> Homo sapiens

<400> 1504

Glu Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met 35 40 45

Gly Trp Met Asn Pro Asn Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Gly Arg Gly Tyr Asp Val Leu Thr Gly Tyr Phe Thr Gly Ser  $100 \ \ \, 105 \ \ \, 110$ 

Pro Leu Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly \$125\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg 145 150 155 160

Val Thr Ile Ser Cys Thr Gly Ile Ser Ser Asn Ile Gly Ala Gly Tyr

Asp Val His Trp Tyr Gln His Leu Pro Gly Thr Ala Pro Lys Leu Leu 180 185 190

Ile Tyr Gly Asn Thr Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Ala Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln 210  $\,$  215  $\,$  220  $\,$ 

Ala Glu Asp Glu Ala Asn Tyr Tyr Cys Gln Ser Tyr Asp Asn Arg Leu 225 230 235 240

Ser Gly His Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1505

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1505

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala  $20 \\ 25 \\ 30$ 

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 40 45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 55 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met  $65 \phantom{000}70\phantom{000}75\phantom{000}$  . 80

Asp Leu Ile Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp \$100\$

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Thr Glm Pro Ser Ser Val Ser Gly Ala Pro Gly Glm Arg Val Thr Ile 160 - 155 145 150

Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ser Ser Asp Asp Val His 175 165 170

Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Arg Leu Val Ile Tyr Gly 180 185

Asn Asp Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Ala Ser Lys 195 200

Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Ser Ala 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1506

<211> 252

<212> PRT <213> Homo sapiens

<400> 1506

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala . 25 20

Ile Ser Tro Val Arg Gln Ala Pro Ala Arg Gly Leu Glu Trp Met Gly 40

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 55

Gly Lys Val Thr Ile Thr Ala Asp Lys Leu Thr Ile Thr Val Tyr Met 75

Asp Leu IIe Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 100 105 110 \_0(

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu 130 135 140

Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile 145 \$150\$ . 160

Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ser Ser Val Asp Val His  $165 \ \ \, 170 \ \ \, 175$ 

Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Arg Leu Val Ile Tyr Gly 180 185 190

Asn Glu Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Ala Ser Lys \$195\$

Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp \$210\$ 215 220

Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Ser Ala 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1507 <211> 244 <212> PRT

<213> Homo sapiens

 $<\!400>1507$  Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Tyr Thr Phe Arg Glu Tyr
20 25 30

Gly Ile Ile Trp Ala Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40

Gly Trp Ile Ser Gly Gln Asn Gly Lys Thr Asn Leu Ala Gln Arg Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Thr Asp Thr Leu Thr Ser Thr Ala Phe 65 70 75 80

Met Glu Leu Thr Asn Leu Arg Val Asp Asp Thr Val Met Tyr Tyr Cys 85 90 95

Ala Ala Ser Gly Pro Gly Trp Phe Asp Pro Trp Gly Lys Gly Thr Leu 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser 130 135

Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser 145 150 155

Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr  $165 \ \ 170 \ \ . \ \ 175$ 

Ala Pro Lys Leu Leu Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val 180 185 190

Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205

Ile Ser Gly Leu Gln Ser Glu Asp Gly Ala Asp Tyr Tyr Cys Ala Ala 210 215 220

Trp Asp Asp Ser Leu Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$  235

Thr Val Leu Gly -

<210> 1508

<211> 254

<211> 234 <212> PRT

<213> Homo sapiens

<400> 1508

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Arg Fhe Asn Arg Tyr \$20\$

Ala Thr Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Leu Phe Gly Thr Thr Lys Tyr Ala Gln Arg Leu 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Thr Thr Asp Arg Phe Gly Ala Lys Asp Val Thr Ala Arg Trp Gly  $100 \ 105 \ 110$ 

Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala 130 135 140

Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val 145  $\phantom{00}$  150  $\phantom{00}$  155  $\phantom{00}$  160

Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp  $165 \\ 170 \\ 175$ 

Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile 180  $$185\ \ \, 190\ \ \, ]$ 

Tyr Gly Asn Ser Asn Arg Pro Ser Val Val Pro Asp Arg Phe Ser Gly \$195\$

Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala 210 \$215\$

Gly Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1509 <211> 253

<212> PRT <213> Homo sapiens

<400> 1509

<400> 1509 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15.

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr  $20 \\ 25 \\ 30$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe  $50^{\circ}$  .  $55^{\circ}$  60

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Gln Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro Glu Gly
100 105 110

Gly Trp Phe Asp Pro Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala 130 135 140

Leu Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly 145 \$150\$

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr \$165\$ \$170\$ \$175\$

Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile 180 185 190

Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly 195  $200\,$  205

Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala 210 \$215\$

Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn . 235 240 225 230

Pro Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 245

<210> 1510

<211> 251 <212> PRT

<213> Homo sapiens .

<400> 1510

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Val Val Lys Pro Ser Glu 1 5 10

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Phe Ile Ser Ser Arg 20 25 30

Thr Ser Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu 35 40 45

Trp Ile Gly Asn Ile Tyr Tyr Thr Gly Lys Thr Tyr Tyr Ser Pro Ser

Leu Lys Ser Arg Val Thr Ile Ser Ala Asp Thr Ser Lys Asn Gln Leu

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr 85

Cys Ala Arg Ala Gly Tyr Asp Leu Leu Thr Gly Tyr Pro Phe Tyr Phe 100 105

Asp Ser Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val 135

Leu Thr Gln Pro Ser Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr 150 155

Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Thr Thr Val Ala 170

Trp Tyr Gln Gln Val Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser 180 185 1769

Asn Asp Arg Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys  $195 \hspace{0.5cm} 200 \hspace{0.5cm} 205 \hspace{0.5cm}$ 

Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Pro His Val Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1511

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1511

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Lys Tyr 20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Asn Ile Lys Glu Asp Gly Arg Glu Lys Tyr Tyr Val Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Asn Ser Leu Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Val Arg Gly Arg Asn Tyr Tyr Asp Phe Leu Thr Gly Tyr Asn Phe Asn 100 105 110

Leu Gly Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 \$120\$

Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala  $130 \,$ 

Leu Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly 145 150 155 160

Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Asn Tyr Tyr 165 170 175

Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile 180 185 190

Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly 195 200 205

Ser Ser Ser Gly Ile Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala 210 220

Asp Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Thr Thr Gly His 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

His Leu Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser  $245 \ \ \,$ 

<210> 1512

<211> 251

<212> PRT <213> Homo sapiens

<213> HOMO Bapi

<400> 1512
Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu Phe Thr Phe Ser Asn Tyr 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Ser Leu Tyr  $_{65}$   $_{70}$   $_{70}$   $_{75}$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
95

Ala Arg Glu Asn Tyr Asp Ser Leu Thr Gly Tyr Tyr Asn Tyr Phe Asp  $100\ -\ 105\ -\ 110$ 

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Thr Gln Pro Ser Ser Asp Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145 150 155 160

Ser Cys Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn Ala Val Ser Trp \$165\$ \$170\$ \$175\$

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser Asn  $180 \,$   $185 \,$   $190 \,$ 

Asn Leu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ala Thr Ser Ala Ala Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu  $210\,^{'}$   $\,$  215  $\,$  220  $\,$ 

Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Thr Leu Asn Ala Glu Val 225 230 235

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1513 <211> 244 <212> PRT

<213> Homo sapiens

<400> 1513

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Gly Arg  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Thr Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gin Asp Arg Val Thr Ile Thr Glu Asp Thr Leu Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Arg Lys Ala Gln Asp Ile Trp Gly Arg Gly Thr Met 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 . 120 125

Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser 130 135 136 140

Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Gly Ser Ala 145 \$150\$

Asn Ile Gly Thr Ile Tyr Val Asn Trp Tyr Gln Gln Val Pro Gly Ala 165 170 175

Ala Pro Lys Leu Met Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val  $180 \,$   $180 \,$   $185 \,$   $190 \,$ 

Phe Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205

Trp Asp Asp Ser Leu Arg Arg Val Val Phe Gly Gly Gly Thr Lys Leu 225  $\phantom{\bigg|}$  . 230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Thr Val Leu Glv

<210> 1514

<211> 257

<212> PRT

<213> Homo sapiens

<400> 1514
Glu Val Gln Leu Val Gin Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Gln Gly Ser Gly Tyr Thr Phe Thr Asp Tyr 20 25 30

Trp	Ile	Ser	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	${\tt Trp}$	Met
		35					40					45			

Gly Arg Ile Asp Pro Sér Asn Ser Tyr Asp Asp Tyr Ser Pro Ser Phe 50 60

Lys Gly Arg Val Ile Ile Ser Ser Asp Glu Ser Asn Ala Thr Ala Tyr 65 70 75 80

Leu Val Trp Asp Ser Leu Gln Ala Ser Asp Ser Ala Thr Tyr Tyr Cys 85 90 95

Ala Arg Leu Lys Ala Pro Tyr Tyr Asp Leu Leu Thr Gly Tyr His Leu 100 105 110

Pro Lys Trp Phe Asp Thr Trp Gly Gln Gly Thr Leu Val Thr Val Ser \$125\$

Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro 145 \$150\$

Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Asn Thr Ser Asn Ile Gly 165  $\,$  170  $\,$  175

Thr Asn Tyr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys 180 185 190

Leu Leu Ile Tyr Arg Asn His Gln Trp Pro Ser Gly Val Pro Asp Arg  $195 \hspace{1.5cm} 200 \hspace{1.5cm} 205$ 

Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly 210 215 220

Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Ser Leu Arg Gly Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu 245 250 255

Gly

<210> 1515 <211> 243 <212> PRT <213> Homo sapiens <400> 1515

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu  $100 \\ 105 \\ 110$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val 130 135 140

Ser Val Ala Pro Gly Lys Thr Ala Arg Ile Thr Cys Gly Gly Asp Asn 145  $^{\circ}$   $^{\circ}$  150  $^{\circ}$  155  $^{\circ}$  160

Ile Gly Ser Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala  $165 \,$   $170 \,$   $170 \,$ 

Pro Val Leu Val Thr Asp Tyr Asp Ile Asp Arg Pro Ser Gly Ile Pro 180 185 190

Glu Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Thr Leu Thr Ile 195  $\phantom{\bigg|}200\phantom{\bigg|}205\phantom{\bigg|}$ 

Ser Arg Val Glu Gly Gly Asp Glu Ala Asp Tyr Tyr Cys Gln Val Trp 210 220 215

Asp Ser Val Thr Asp His Val Val Phe Gly Gly Gly Thr Lys Val Thr 235 240 230

Val Leu Gly

<210> 1516

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1516

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 . 10 1.5

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 55

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 75 70

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Gln Gly Thr Leu 105 100

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 120 125 115

Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 135

Gly Ala Pro Gly Glm Arg Val Thr Ile Ser Cys Thr Gly Ser Arg Ser 155 150

Asn Ile Gly Thr Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly 165 170 18 Y 19 1

Thr Ala Pro Lys Leu Leu Ile Tyr Ala Asp Asn Asn Arg Pro Ser Gly 180 180 190

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 210 215 220

Ser His Asp Ser Ser Leu Gly Gly Ser Val Phe Gly Gly Gly Thr Lys 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Thr Val Leu Gly 245

<210> 1517

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1517

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35  $\phantom{\bigg|}40\phantom{\bigg|}45\phantom{\bigg|}$ 

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Val 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 100 105 110

. Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu 130 140

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Trp Val Thr Ile 145 \$150\$

Pro Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp

Tyr Gln His Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser Asn 180 185 190

Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195  $\phantom{-}200\phantom{0}$ 

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asn Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly His Val 225 230 235

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1518

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1518

Gln Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Ser

Ala Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Arg

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Gly Pro Met Ser Gly Thr Pro Asn Tyr Ala Gln Lys Phe . 50  $\,$   $\,$  60  $\,$ 

Gln Gly Arg Val Thr Met Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr

Leu Glu Leu Ser Asn Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Gly Arg Tyr Tyr Asp Met Leu Thr Arg Gly Gly Tyr Phe Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Tyr Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 120

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu  $130 \ \ \, 140 \ \ \,$ 

Thr Gln Pro Ser Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Val 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Tyr Asn Ser Val Asn Trp \$165\$ \$170\$

Ser Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195  $200\,$  205

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Ala Trp Tyr Asp Ser Leu Ser Gly His Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Val Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1519 <211> 252

<212> PRT <213> Homo sapiens

<213> HOMO Sapren

 $<\!400>$  1519 Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  $20 \\ 20 \\ 25 \\ 30$ 

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $_{\rm 35}$   $_{\rm 40}$   $_{\rm 45}$ 

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Lys Arg Gln Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Phe Asp  $100 \,$ 

Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu 130 135 140

Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Ser Val 145  $\phantom{0}$   $\phantom{0}$  150  $\phantom{0}$   $\phantom{0}$  155  $\phantom{0}$  160

Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His 165 170 175

Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly  $180 \ \ 185 \ \ 190$ 

Asn Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Val Ser Lys \$195\$

Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp 210 220

Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Gly Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Ile Phe Gly Thr Gly Thr Lys.Val Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1520

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1520

Glu Val Gln Leu Val Gln Ser Gly Gly Glu Val Lys Arg Pro Gly Ala 1 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Arg Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Gly Ile Ser Trp Val arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Lys Thr Ser Phe Ala Glu Lys Phe
50 60

Gln Gly Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Thr Thr Val Asp  $65 \ \ 70 \ \ 75 \ \ 80$ 

Met Glu Leu Arg Asn Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Thr Asp Tyr Asp Ile Leu Thr Gly Tyr Pro Met Gly Tyr Phe 100 105 110

Asp Pro Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val 130 140

Val Thr Gln Pro Pro Ser Ala Pro Gly Ser Pro Gly Gln Ser Val Thr 145 \$150\$

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Lys Tyr Val  $165 \ \ \,$  170  $\ \ \,$  175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr . 180  $$180\$ 

Glu Val Asn Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser  $195 \\ 200 \\ 205$ 

Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Glu Gly Ser Asn Asn Ala 225 230 235 240

Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1521 <211> 245 <212> PRT <213> Homo sapiens <400> 1521 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 1 . 5 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met . Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 55 60 Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 70 .75 80 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Met 105 110 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 130 135 140 Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser 150 Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly 170 . 175 165 Thr Val Pro Lys Leu Leu Ile Tyr Gly Asp Ser His Arg Pro Ser Gly 180 185 Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195 200 205

Ser Phe Asp Asn Ser Leu Ser Ala Ser Ile Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly

<210> 1522

.<211> 254

<212> PRT

<213> Homo sapiens

<400> 1522

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met \$35\$

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr  $_{65}$   $_{70}$   $_{70}$ 

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \ \ 90 \ \ 95$ 

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \\ 105 \\ 110$ 

Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly \$115\$ \$120\$ \$125\$

Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Gln

Ser Val Leu Thr Gln Pro Pro Ser Met Ser Ala Ala Pro Gly Gln Lys

Val Thr Ile Pro Cys Ser Gly Gly Ser Ser Asn Ile Gly Thr Arg Tyr 165 170 175

Val Ser Trp Tyr Gln Gln Val Pro Gly Thr Val Pro Lys Leu Ile Ile 180 185 190

Tyr Asp Asn Asp Lys Arg Pro Ser Gly Ile Ser Asp Arg Phe Ser Gly 195 200 205

Ser Lys Ser Gly Thr Ser Ala Phe Leu Gly Ile Thr Gly Leu Gln Thr 210 215 220

Gly Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Arg Ser Leu Asn 225 230 235 240

Ala Gly Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1523 <211> 245

<211> 245 <212> PRT

<213> Homo sapiens

<400> 1523

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} . \hspace{1cm} 45$ 

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe .65  $\phantom{0}70\phantom{0}75\phantom{0}$  80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu 100 . 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Ala Gln Thr Val Val Ile Gln Glu Pro Ser Leu Thr

Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys Ala Ser Ile Thr Gly 145 150 155 160

Ala Val Thr Ser Gly Asn Tyr Pro Asn Trp Phe Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Ala Leu Ile Tyr Ser Thr Asp Asn Lys His Ser Trp 180 185 190

Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly Asp Lys Ala Ala Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Thr Leu Ser Gly Val Gln Pro Glu Asp Glu Ala Asp Tyr Tyr Cys Leu 210 215 220

Leu Tyr Tyr Gly Gly Ala Gln Pro Trp Val Phe Gly Gly Gly Thr Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Val Thr Val Leu Gly 245

<210> 1524

<211> 244 <212> PRT

<213> Homo sapiens

<400> 1524

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 . 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe  $65 \ 70 \ 75 \ 80$ 

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Met 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Ala Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser 130 135 140

Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 \$150\$

Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr \$165\$

Ala Pro Lys Leu Leu Ile Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val \$180\$

Pro Asp Arg Val Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205

Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala 210 220

Trp Asp Asp Ser Phe Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu 225 230 235 235

Thr Val Leu Gly

<210> 1525 <211> 254 <212> PRT

<213> Homo sapiens

 $<\!400>$  1525 Gin Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr  $20 \\ 25 \\ 30$ 

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Met Asn Pro Lys Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe 50 60

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Ala Tyr Phe Cys 85 90 95

Ala Arg Gly Ser Gly Tyr Asp Leu Leu Thr Gly Tyr Phe Thr Gly Ser

Pro Leu Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145 \$150\$

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Lys  $165 \\ 170 \\ 175$ 

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 185 190

Ile His Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195  $200 \ 205$ 

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser Gly 225 230 235

Thr Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1526

<211> 253

<212> PRT <213> Homo sapiens

<213> HOMO Sapien

 $<\!400>1526$  Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Thr Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Asp Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Ala Thr Asn His Ala Gln Arg Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$ 

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Asp Val Ser Gly Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Arg Asp Asp Leu Thr Gly Tyr Leu Tyr Asp Ala  $100 \ \ 105 \ \ \ 110$ 

Phe Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 \$120\$

Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Val Lys Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser 165 \$170\$

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly \$180\$

Arg Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}200\phantom{\bigg|}205\phantom{\bigg|}$ 

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp 210 225

Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Tyr His Leu 225 230 235 240

Val Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1527 <211> 247 <212> PRT <213> Homo sapiens <400>- 1527 Gln Ile Thr Leu Lys Glu Phe Gly Gly Gly Leu Val Gln Pro Gly Gly 10 Ser Leu Arg Leu Ser Cys Gly Ser Ser Gly Phe Thr Phe Pro Glu His 25 Ser Met Asp Trp Val Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile 40 Ala Arg Ser Arg Asn Arg His Val Ser His Ser Thr Asp Tyr Ala Ala 55 . 60 Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Phe Leu Thr Asn Ser 70 75 Leu Ile Leu Gln Leu Asn Asp Leu Lys Thr Glu Asp Thr Ala Arg Tyr 85 90 Tyr Cys Ala Ser Gly Tyr Asp Thr Ala Met Gln Tyr Trp Gly Arg Gly 105 110 100 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Leu Ser Tyr Val Leu Thr Gln Pro Pro 135 Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Gln Leu 165 Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser Asp Asn Arg Arg Pro 185 180

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala 195 200 205

Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Tyr Val Phe Gly Thr Gly 225 230 235 240

Thr Lys Val Thr Val Leu Gly 245

<210> 1528

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1528

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser G1y Gly Thr Val Ser Ser Arg . 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Gln Gly Thr Leu  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Ala Gln Ser Val Val Thr Gln Pro Pro Ser Ala Ser 130 135 140

Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser 145 150 155 . 160

Asn Ile Gly Ser Ser Ser Val Ile Trp Tyr Gln Arg Leu Pro Gly Thr 165 170 175

Ala Pro Lys Leu Ieu Ile Phe Tyr Asn Asn Gln Arg Pro Ser Gly Val

Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205

Ile Asn Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr 210  $\,$  215  $\,$  220  $\,$ 

Trp Asp Thr Ser Leu Asn Gly His Val Val Phe Gly Gly Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly

<210> 1529

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1529

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Gly 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu 35 40 45

Gly Trp Ile Ser Ala Phe Asn Gly Gln Thr Asn Tyr Ala Gln Lys Val $50 \\ 55 \\ 60$ 

Gln Gly Arg Leu Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Ser 65 70 75 80

Met Glu Leu Arg Ser Leu Thr Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Asp Ile Leu Thr Gly Ser Asn Phe Gly Gln Asp 100 105 110

Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser  $115 \\ 120 \\ 125$ 

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr 130 140

Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Cys Ser Gly Gly Ser Ala Asn Ile Gly Ser Asn Tyr Val Tyr Trp Tyr \$165\$ \$170\$

Lys Gln Leu Pro Gly Thr Ala Pro Lys Thr Leu Ile Tyr Thr Thr Asn  $180 \,$ 

Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly 195 200 205

Asp Tyr Tyr Cys Ala Ser Trp Asp Glu Ser Leu Ser Gly Val Val Phe  $225 \\ \hspace*{1.5cm} 230 \\ \hspace*{1.5cm} 235 \\ \hspace*{1.5cm} 240 \\ \hspace*{1.5cm}$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245  $\phantom{0}$  250

<210> 1530 <211> 253

<212> PRT <213> Homo sapiens

<213> Homo sapien

<400> 1530 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Tyr Tyr Ser Gln Lys Leu 50 55 60

Gln Asp Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Arg Met Gly His Tyr Asp Ile Leu Thr Gly Tyr Arg His Tyr Gly 100 105 110

Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Leu Ser 130 135 140

Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr 145 150 150 160

Val Thr Ile Thr Cys Gln Gly Asp Ser Leu Lys Ser Tyr Tyr Ala Ser 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr Asn 180 185 190

Lys Asn Ser Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Thr Gln Ala Glu Asp 210 225

Glu Ala Asp Tyr Tyr Cys Asn Ala Arg Asp Arg Ser Gly Ile His Ser 225 \$230\$

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1531 <211> 257 <212> PRT

<213> Homo sapiens

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met 35 40 45

Gly Trp Met Asn Pro Lys Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe 50 60

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr  $65 \hspace{1cm} 75 \hspace{1cm} 80 \hspace{1cm}$ 

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Ser Gly Tyr Asp Leu Leu Thr Gly Tyr Phe Thr Gly Ser 100 105 110

Pro Leu Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu 130 140

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys 145 150 155 160

Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Tyr Ile Val Ser Asn 165 170 175

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ser Pro Thr Thr Val

Ile Tyr Glu Asp Asp Arg Arg Pro Ser Gly Val Pro His Arg Phe Ser 195 200 205

Gly Ser Ile Asp Arg Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly 210 215 220

Leu Gln Thr Glu Asp Glu Gly Asp Tyr Tyr Cys Gln Ser Tyr Asp Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Thr Ser Arg Val Ile Leu Phe Gly Gly Gly Thr Lys Val Thr Val Leu  $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255 \hspace{1.5cm}$ 

Gly

<210> 1532 <211> 245

<211> 243

<213> Homo sapiens

<400> 1532 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 35 Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 60 55 Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu 100 105 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 120 115 ... Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 135 Gly Ala Pro Gly Gln Ser Val Ser Val Ser Cys Thr Gly Ser Ile Ser -150 Asn Ile Gly Thr Gly Tyr Asp Val His Trp Tyr Gln His Leu Pro Gly 165 Arg Gly Pro Lys Val Leu Ile Tyr Gly Asn Asn Asp Arg Pro Trp Gly 180 Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Gly Thr Ser Ala Ser Leu - 200 Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu Gly Asp Tyr Phe Cys Gln 215 Thr Tyr Asp Asn Glu Leu Ser Gly Tyr Val Phe Gly Ser Gly Thr Lys 235 240 1795

1795

Leu Thr Val Leu Gly 245

<210> 1533

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1533

GÎN VAI GÎN Leu VAI GÎN SER GÎY ALA GÎU VAI LYS LYS PRO GÎY SER 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val 130 135 140

Ser Val Ser Ala Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly Asp Val 145 150 155 160

Leu Ser Lys Lys Tyr Val Tyr Trp Tyr Arg Gln Lys Ser Gly Gin Ala 165 170 175

Pro Val Leu Val Ile Tyr Glu Asn Thr Lys Arg Pro Ser Gly Ile Pro

Asp Arg Leu Ser Gly Ser Arg Ser Gly Thr Met Ala Thr Leu Thr Val

Tyr Ile Ser Asn Asp Gln Trp Val Phe Gly Gly Gly Thr Lys Leu Thr 225 230 235 240

Val Leu Gly

<210> 1534

<211> 252

<212> PRT <213> Homo sapiens

 $<\!400^\circ$  >1534 Glu Val Gln Leu Val Gln Ser Gly Gly Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ser Ser His  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val \$35\$

Gly Trp Ser Ser Ala His Asp Asp Asn Thr Lys Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55$ 

Gln Gly Arg Val Thr Met Thr Thr Asp Ala Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Pro Tyr Tyr Asp Pro Leu Thr Ala Tyr Thr Phe Gln Tyr Phe  $100 \ \ 105 \ \ \ 110$ 

Gly Asn Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr 130 135 140

Thr Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr  $180 \,\,$   $185 \,\,$   $190 \,\,$ 

Gly Ala Ser Arg Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser 195 200 205

Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Arg Leu Glu Pro Glu 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ile Ser Pro Gly Leu 225 230 235 240

Ser Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg 245 250

<210> 1535

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1535

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 . 25 . 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 \$40\$

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met  $65 \phantom{000}70\phantom{000}75\phantom{000}$  75

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu 130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 150 155 160

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr 165 170 175

Gln Gln Arg Pro Gly Gln Ala Pro Ala Leu Val Phe Tyr Gly Lys Asn 180 185 190

Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 220

Asp Tyr Tyr Cys Asn Ser Arg Asp Leu Asp Gly Asn His Arg Val Phe  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm} ...$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1536

<211> 251

<212> PRT

<213> Homo sapiens .

<400> 1536

Glu Val Gln Leu Val Glu Ser Gly Thr Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ala Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Arg  $20 \\ 25 \\ 30$ 

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Gly Ile Gly Pro Met Ser Gly Thr Pro Asn Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$ 

Gln Gly Arg Val Thr Met Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

.. 1799

Leu Glu Leu Ser Asn Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 95 85 90

Ala Thr Gly Arg Tyr Tyr Asp Met Leu Thr Arg Gly Gly Tyr Phe Asp 100 105

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu 130 135 140

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Ile Thr Ile 145 150 155 160

Ser Cys Ser Gly Ser Arg Ser Asn Ile Gly Arg Asn Thr Val Thr Trp 170

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser Thr

Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Asp Asp Glu 215

Ala Asp Tyr Phe Cys Ala Ala Trp Asp Asp Ser Leu Gln Ala Leu Val 235 225 230

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1537 <211> 252

<212> PRT <213> Homo sapiens

<400> 1537 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr 20 25

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  $^{\circ}$  35  $^{\circ}$  40  $^{\circ}$  . 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe 50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys \$85\$ 90 95

Ala Arg Leu Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro Ser Gly Phe  $100 \,$   $105 \,$   $110 \,$ 

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115  $$120\$ 

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val 130 135 140

Leu Thr Gln Pro Ser Ser Val Ser Gly Thr Pro Gly Gln Arg Val Thr 145 \$150\$

Ile Ser Cys Ser Gly Ser Ser Ser Asp Ile Gly Arg Asn Thr Val Asn 165 \$170 175

Trp Tyr Arg Gln Val Pro Gly Thr Ala Pro Lys Leu Leu Ile His Thr 180 185 190

Ile Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys 195 200 205

Glu Ala Asp Tyr Tyr Cys Ser Ser Trp Asp Asp Ser Leu Asn Ala Trp 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ \,$ 

<210> 1538 <211> 251 <212> PRT

<213> Homo sapiens

<400	> 15	38													
Gln 1	Val	Gln	Leu	Gln 5	Glu	Ser	Gly	Pro	Gly 10	Leu	Val	Gln	Pro	Ser 15	Gln
Thr	Leu	Ser	Leu 20	Thr	Cys	Asn	Val	Ser 25	Gly	Gly	Ser	Ile	Ser 30	Ser	Asn
Ser	Asp	Tyr 35	Trp	Gly	Trp	Ile	Arg 40	Gln	Pro	Pro	Gly	Lys 45	Gly	Leu	Glu
Trp	Ile 50	Gly	Asn	Val	Tyr	His 55	Thr	Gly	Thr	Thr	Phe 60	Tyr	Thr	Pro	Ser
Leu 65	Arg	Ser	Arg	Val	Thr 70	Ile	Ser	Val	Asp	Thr 75	Ser	Lys	Asn	Gln	Phe 80
Ser	Leu	Gln	Val	Ala 85		Val	Thr	Gly	Ala 90	Asp	Thr	Ala	Val	Tyr 95	Tyr
Cys	Ala	Arg	Arg 100	Phe	Tyr	Asp	Leu	Leu 105	Thr	Gly	Tyr	Ser	Ala 110	Phe	Asp
Ser	Trp	Gly 115	Gln	Gly	Thr	Leu	Val 120	Thr	Va1	Ser	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130		Gly	Gly	Ser	Gly 135	Gly	Gly	Gly	Ser	Ala 140	Gln	Ser	Val	Leu
Thr 145	Gln	Pro	Pro	Ser	Val 150	Ser	Ala	Ala	Pro	Gly 155	Gln	Lys	Val	Ala	Ile 160
Ser	Cys	Ser	Gly	Ser 165	Asn	Ser	Asn	Ile	Gly 170	Asn	Asn	Tyr	Val	Ser 175	Trp
Tyr	Gln	Gln	Leu 180		Gly	Thr	Ala	Pro 185	Lys	Leu	Leu	Ile	Tyr 190	Asp	Ser
Ile	Arg	Arg 195		Ser	Gly	Ile	Pro 200		Arg	Phe	Ser	Gly 205	Ser	Lys	Ser
Gly	Thr 210		Ala	Thr	Leu	Gly 215		Thr	Gly	Leu	Gln 220		Gly	Asp	Glu
Ala	Asp	Tyr	Tyr	Суз	Gly	Thr	Trp	Asp	Thr	Ser	Leu	Asn	Ala	Tyr	Val

Phe Gly Ala Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1539

<211> 255 <212> PRT

<213> Homo sapiens

<400> 1539

Gln Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45 \cdot$ 

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe 50 60

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 . 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser 100 105 110

Ala Phe Asp Gln Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly \$115\$

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln  $130\,$ 

Ser Val Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg 145 - 150 155 160

Val Thr Ile Ser Cys Thr Gly Ile Ser Ser Asn Ile Gly Ala Gly Tyr \$165\$ \$170\$  $^{\prime}$  \$175\$

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Arg Leu Leu
180 185 190

The Tyr Gly Asn Val Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Arg Leu 225 230 235 240

Ser Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1540

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1540

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 40 45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp

Met Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Tyr Val 130 135 140

Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln Thr Ala Ser 145 150 150 155 160

Ile Asn Cys Gly Gly Asn Thr Ile Gly Ser Lys Thr Val Gln Trp Tyr \$165\$ \$170\$

Gln Gln Lys Pro Gly Gln Ala Pro Val Val Val Val Tyr Asp Asn 180 185 190

Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser Lys Ser Gly 195 200 205

Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Asp Asp Gly Ala 210 220

Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Val Val Phe 225 230 235 240

Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1541

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1541

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe 50

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \ \ 105 \ \ 110$ 

Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 . 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu 130 135

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145 150 155

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Asn Ser Tyr Val 165 170 175

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Pro Val Ile Tyr 180 185 190

Thr Lys Asn Asn Arg Pro Ser Gly Ile Pro Glu Arg Phe Ser Gly Ser 195 200 205

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 210 \$215\$

Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Arg Asp Arg Ser Gly His Gly 225 \$230\$

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1542

<211> 251

<212> PRT <213> Homo sapiens

<400> 1542

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Arg Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr 20 25 30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 . . 45

Ser Gly Ile Ile Trp Asn Gly Gly Thr Thr Asp Tyr Ala Asp Thr Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95 \hspace{0.5cm}$ 

Ala Arg Glu Tyr Tyr Asp Val Leu Thr Gly Leu Phe Tyr Tyr Met Asp 100 105 110

Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Gln Pro Val Leu  $130\,$ 

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp 165 170 175

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Glu Leu Leu Ile Tyr Ser Asn 180 185 190

Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 . 220

Ala Asp Tyr Tyr Cys Ala Ala Tyr Asp Asp Ser Leu Asn Gly Trp Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1543

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1543
Glu Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Asp Asn Tyr
20 25 30

Gly Ile Ala Trp Leu Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $^{\prime}$  35  $^{\prime}$  45  $^{\prime}$ 

Arg Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Pro Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Asp Asp Arg Asp Ile Leu Thr Asn Tyr Tyr Leu Glu Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Gln His Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val 130 135 140

Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr 145  $$150\,$   $$155\,$   $$160\,$ 

Ile Ser Cys Thr Gly Ser Thr Ser Asn Ile Gly Ala Gly Tyr Asp Val  $165 \\ 170 \\ 175$ 

His Trp Tyr Gln Gln Leu Pro Gly Arg Ala Pro Lys Leu Leu Ile Tyr  $180 \,$   $\,$   $185 \,$   $\,$   $\,$   $190 \,$ 

Ala Asn Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Thr Ala Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Asp Glu Ala Gly Tyr Tyr Cys Gln Ala Tyr Asp Lys Asn Ile Glu Glu 225 230 235 240

Tyr Val Phe Gly Ser Gly Thr Gln Leu Thr Val Leu Ser  $245 \hspace{1cm} 250 \hspace{1cm}$ 

<sup>&</sup>lt;210> 1544 <211> 254

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<400> 1544 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 10 Ser Val Lvs Val Ser Cvs Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 30 20 25 Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met 35 40 Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe. 50 55 Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 65 70 75 Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140 Ser Val Val Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln Ser 150 155 Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Arg Tyr Asn 165 170 Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Arg Ala Pro Lys Leu Met 185 180 Tie Tvr Glu Val Asn Lvs Arg Pro Ser Glv Val Pro Asp Arg Phe Ser 195 200 Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu Gln 215

Ala Glu Asp Glu Ala Asn Tyr Tyr Cys Ser Ser Tyr Ala Gly Ser Asn 225 \$230\$

Ile Glu Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1545

<211> 253 <212> PRT

<213> Homo sapiens

<400> 1545

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25 30

Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met \$35\$

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 95 90 90 95

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser  $100 \ \ 105 \ \ \ 110$ 

Ala Phe Asp Gln Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln 130 135 140

Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Ser Gly Gln Arg 145 150 155 160

Val Thr Ile Pro Cys Ser Gly Ser Ser Ser Asn Ile Gly Ile Gly Ser 165 170 175

Val Ser Trp Tyr Gln Gln Phe Pro Gly Ser Ala Pro Lys Phe Leu Ile 180 185 190

Ser Gly Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Val Ser 195 200 205

Lys Ser Gly Thr Ser Ala Thr Leu Asp Ile Thr Gly Leu Gln Thr Gly 210  $\phantom{-}215\phantom{+}220\phantom{+}$ 

Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Thr Thr Leu Asn Ala 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Trp Val Phe Gly Ala Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1546

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1546

Gln Val Gin Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gly

1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Asp Ser Ile Arg Gly Gly 20 25 30

His Trp Trp Asn Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp 35 40 45

Lys Ser Arg Val Thr Leu Ser Ala Asp Lys Ser Lys Asn Leu Phe Ser 65 70 75 80

Ala Arg Gly Asp Tyr Asp Val Leu Thr Gly Tyr Leu Arg Lys Leu Asp  $100~\ensuremath{^{\circ}}$   $^{\circ}$  110

Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Pro Val Leu 130 135 140

Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145  $\phantom{-}150\phantom{0}$  150  $\phantom{-}155\phantom{0}$  160

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Arg Thr Val Asn Trp 165 170 175

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Val Tyr Ser Thr 180 185 190

Asn Leu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ser Ala Trp Asp Asp Ser Leu Asn Gly Pro Val 225 . 230 . 235 .  $240\,$ 

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1547

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1547

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser . 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg  $20 \\ 25 \\ 30$ 

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \\ 90 \\ 95$ 

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Leu Ser Tyr Val Leu Thr Gln Pro Pro Ser Ala  $130 \,$   $135 \,$   $140 \,$ 

Ser Val Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Gly Ser 145 150 155 160

Thr Asn Ile Gly Ser Thr Tyr Val Asn Trp Tyr Gln His Leu Pro Gly 165 \$170\$

Thr Ala Pro Lys Leu Leu Met Tyr Asn Asn Asn Glu Arg Pro Ser Gly 180  $$185\$ 

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ala Ile Thr Gly Val Arg Ser Gly Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

Leu Thr Val Leu Gly 245

<210> 1548

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1548

Gin Val Gin Leu Gin Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Tyr Ser Ile Ser Ser Gly 20 25 30

Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp 35 40 45

Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu 50 60

Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser 65 70 75 80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val His Tyr Asp Ile Leu Thr Gly Tyr Leu Trp Ala Phe Asp 100 105 110

Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu 130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145  $$\rm 150$  155 160

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr \$165\$ \$170\$ \$175\$

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn 180 185 190

Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Thr Gln Ala Glu Asp Glu Ala 210  $\phantom{\bigg|}215\phantom{\bigg|}$  220

Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1549 <211> 252 <212> PRT

<212> PKT <213> Homo sapiens

<400> 1549

Gin Val Gin Leu Val Gin Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 40 . 35 Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 70 Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 100 105 Met Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125 Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Ser Val Thr Ile 150 155 Ser Cys Ser Gly Ser Ile Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp 165 Tyr Gln His Phe Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Lys 180 185 190 Asn Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 200 205 Glv Thr Ser Ala Thr Leu Val Ile Thr Glv Leu Gln Thr Glu Asp Glu 215 210 220

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

230

Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu Ser His Ser Ala

<sup>&</sup>lt;210> 1550 <211> 245

<sup>&</sup>lt;211> 245 <212> PRT

<sup>&</sup>lt;213> Homo sapiens

<400> 1550 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1.0 5 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe 50 55 60 Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 70 75 Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 95 85 90 Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu 100 105 110 Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 120 125 Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Ala Ser 135 Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Thr Asn Ser 155 160 1.50 Asn Ile Gly Ser Asn Tyr Val Tyr Trp Tyr Arg His Leu Pro Gly Thr 170 165 Ala Pro Glu Leu Leu Ile Tyr Asn Asn Asn Arg Arg Pro Ser Gly Val 180 185 190 Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 200 195 Ile Arg Gly Leu Arg Ser Asp Asp Glu Ala Asp Tyr Tyr Cys Ala Ala 220 215

Trp Asp Asp Ser Leu Ser Val Tyr Tyr Val Phe Gly Thr Gly Thr Lys 225 230 235 240

Leu Thr Val Leu Gly 245

<210> 1551

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1551

Gln Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ala Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Arg 20 25 30

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Gly Ile Gly Pro Met Ser Gly Thr Pro Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Leu Glu Leu Ser Asn Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Thr Gly Arg Tyr Tyr Asp Met Leu Thr Arg Gly Gly Tyr Phe Asp  $100 \hspace{1cm} 105 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ser Val Val 130 135 140

Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Tyr Val Ser Trp \$165\$ \$170\$ \$175\$

Tyr Arg Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Ser 180 185 190

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 . 205

Gly Ser Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln Thr Gly Asp Glu 210. 215 220

Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Gly Leu Ser Ala Val Val 225 230 235

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1552

<211> 259 <212> PRT

<213> Homo sapiens

<400> 1552

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala

Ser Val Lys Val Ser Cys Glu Ala Ser Ala Glu Leu Phe Ala Ser Ser 20 25

Asp Ile Asn Trp Val Arg Arg Ala Thr Gly Gln Gly Leu Glu Trp Met 40

Gly Trp Val Asn Pro Ser Ser Gly Asn Ala Gly Tyr Ala Glu Lys Phe

Glu Gly Arg Val Ser Met Thr Thr Asn Ile Pro Lys Lys Thr Val Tyr 75

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Gly Thr Gly Tyr Asp Ile Leu Thr Gly Tyr Tyr Met Gly Ser 100 105

Ala Phe Asp Gln Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly 115 120

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 130 135

Ala Val Leu Thr Gln Pro Ser Ser Leu Ser Ala Ser Pro Gly Ala Ser 145 150 155

Ala Ser Leu Thr Cys Thr Leu Arg Ser Asp Ile Asn Leu Glu Thr Ser \$165\$

Arg Ile Tyr Trp Phe Gln Gln Lys Pro Gly Ser Pro Pro Arg Tyr Leu  $180 \,\,$   $185 \,\,$  190

Leu Arg Tyr Gln Ser Asp Ser Asp Asn Asn Leu Asp Ser Gly Val Pro

Ser Arg Phe Ser Gly Ser Lys Asp Ala Ser Ala Asn Ala Gly Ile Leu 210 215 220

Leu Ile Ser Gly Val Gln Ser Glu Asp Glu Ala Asp Tyr His Cys Met 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Ile Trp His Ser Gly Gly Ser Val Phe Gly Gly Gly Thr Gln Leu Thr 245 250 255

Val Leu Thr

<210> 1553 <211> 257 <212> PRT

<213> Homo sapiens

 $<\!400\!>$  1553 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm} .$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Asn Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Leu Trp Asp  $100 \ \ 105 \ \ 110$ 

Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val 115 120 125

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 130 135 140

Ser Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro 145 150 155

Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly 165 170 175

Ser Asn Ile Val His Trp Tyr Gln Gln Phe Pro Gly Ser Ala Pro Lys \$180\$

Leu Leu Ile Asn Ser Asn Tyr Leu Arg Pro Ser Gly Val Pro Asp Arg 195 200 205

Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly 210 215 220

Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$  235

Ser Leu Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu \$245\$

Gly

<210> 1554

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1554

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu Phe Thr Phe Ser Asn Tyr

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ala Val Ile Ser Tyr Asp Gly Thr Tyr Lys Ser Tyr Ala Asp Ser Met 50

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Ser Leu Tyr  $65 \\ 70 \\ 75 \\ 80$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Arg Glu Asn Tyr Asp Ser Leu Thr Gly Tyr Tyr Asn Tyr Phe Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

| Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala Val Leu 130 135 140

Thr Gln Pro Ser Ser Asp Ser Gly Thr Pro Gly Gln Arg Val Thr Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Trp Ser Gly Ser Gly Ser Asn Ile Gly Ser Asn Ala Val Ser Trp \$165\$

Tyr Gin Gln Leu Pro Gly Thr Ala Ser Lys Leu Leu Ile Tyr Ser Asn 180 185 190

Asn Leu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Ala Thr Ser Ala Ala Leu Ala IIe Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Thr Leu Asn Ala Glu Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<sup>&</sup>lt;210> 1555

<sup>&</sup>lt;211> 251

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;400> 1555

Gln 1	Val	Gln	Leu	Val 5	Pro	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Ser	Tyr
Gly	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Trp 50	Ile	Ser	Ala	Tyr	Asn 55	Gly	Asn	Thr	Asn	Tyr 60	Ala	Gln	Lys	Leu
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Thr	Asp	Thr	Ser 75	Thr	Ser	Thr	Ala	Tyr 80
Met	Glu	Leu	Arg	Ser 85	Leu	Arg	Ser	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
 Ala	Arg	Thr	His 100	Tyr	Asp	Ile	Leu	Thr 105	Gly	Tyr	Tyr	Ser	His 110	Pro	Leu
Asp	Tyr	Trp 115	Gly	Lys	Gly	Thr	Leu 120	Val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Ala	Leu	Ser	Ser
Glu 145		Thr	Gln	Asp	Pro 150	Ala	Val	Ser	Val	Ala 155	Leu	Gly	Gln	Thr	Val 160
Thr	Ile	Thr	Cys	Gln 165	Gly	Asp	Ser	Leu	Arg 170	Thr	Tyr	Pro	Thr	Thr 175	Trp
Tyr	Gln	Gln	Arg 180		Arg	Gln	Ala	Pro 185	Val	Ala	Val	Ile	Ser 190	Gly	Lys
Asn	Tyr	Arg 195	Pro	Ser	Gly	Ile	Pro 200	Asp	Arg	Phe	Ser	Gly 205	Ser	Thr	Ser
Gly	Asp 210		Ala	Ser	Leu	Thr 215		Thr	Gly	Ala	Gln 220	Ala	Glu	Asp	Glu
Ala 225		Tyr	Tyr	Cys	Met 230	Ser	Arg	Asp	Ser	Ser 235	Gly	Thr	Phe	Val	Leu 240

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Ser

<210> 1556

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1556

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala  $20 \\ 25 \\ 30$ 

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35  $\phantom{\bigg|}40\phantom{\bigg|}$  45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \\ 90 \\ 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105$ 

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Val  $130 \\ 135 \\ 140$ 

Thr Gln Pro Pro Ala Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145 \$150\$

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Tyr Tyr Val Ser Trp \$165\$

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Asp Asn

Asp Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Val Ser Lys Ser 195 200 205

Gly Thr Ser Ser Thr Leu Ala Ile Thr Gly Leu Gln Thr Gly Asp Glu 210  $\phantom{000}215$   $\phantom{000}$  . 220

Ala Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu Ser Ala Gly Val 225 230 235

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly  $245 \ \ \,$  250

<210> 1557

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1557

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Arg Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ile Ser Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Ser Ile Tyr Glu Asp Lys Val Lys Tyr Ala Glu Lys Phe 50 60

Gln Gly Arg Leu Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $65 \phantom{000}70\phantom{000}70\phantom{000}75\phantom{0000}$ 

Met Glu Leu Thr Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Pro Tyr Asp Ile Leu Thr Gly Tyr Trp Gly Ala Phe Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu 130 135 140

Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile 145 . 150 . 155 . 160

Trp Tyr Lys Gln Leu Pro Arg Thr Ala Pro Gln Leu Leu Ile Tyr Arg  $180 \,$   $\,$   $185 \,$   $\,$   $190 \,$ 

Asn Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys 195 200 205

Glu Ala Glu Tyr Tyr Cys Gln Ser Tyr Asp Thr Ser Leu Ser Gly Ser 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

<210> 1558

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1558

Gln Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 1  $\phantom{-}1\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr  $20 \\ 25 \\ 30$ 

Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \,$ 

Gly Trp Met Asn Pro Lys Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe  $50 \,$ 

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr 65  $\phantom{0}75$   $\phantom{0}75$ 

Ala Arg Gly Ser Gly Tyr Asp Leu Leu Thr Gly Tyr Phe Thr Gly Ser  $100 \\ 0.05$ 

Pro Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val. Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln 130 135 140 Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln Ser 145 150 155 Val Thr Ile Ser Cys Thr Gly Thr Ser Asn Asp Val Ser Ala Tyr Lys 165 170 175 Tyr Val Ser Trp Tyr Gln Gln Tyr Pro Gly Arg Ala Pro Lys Leu Ile 180 185 190 Leu Tyr Glu Val Thr Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 195 200 205 Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Val Ser Gly Leu Gln 210 215 220 Ala Asp Asp Glu Ala Thr Tyr Phe Cys Ser Ser Phe Ala Gly Ser Asn 225 230 235 240 Asn Phe Ala Gly Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 245 <210> 1559 <211> 256 <212> PRT <213> Homo sapiens <400> 1559 Gln Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Asn Phe Met Asn Tyr 20 25 Asp Ile Asn Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met 35 40

Gly Trp Met Asn Pro Lys Ser Gly Lys Thr Asp Ser Ala Glu Lys Phe 50 55 60

Glu Gly Arg Val Thr Met Thr Thr Asp Thr Ser Arg Asp Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys 85 90 95

Ala Arg Gly Ser Gly Tyr Asp Leu Leu Thr Gly Tyr Phe Thr Gly Ser  $100 \\ 105 \\ 110$ 

Pro Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln  $130\ \ \, 135\ \ \, 140\ \ \,$ 

Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln Ser 145  $\phantom{\bigg|}150\phantom{\bigg|}$  150  $\phantom{\bigg|}155\phantom{\bigg|}$  155  $\phantom{\bigg|}160\phantom{\bigg|}$ 

Val Ala Ile Ser Cys Thr Gly Thr Ser Asn Asp Val Ser Ala Tyr Lys \$165\$ \$170\$ \$175\$

Tyr Val Ser Trp Tyr Gln Gln Tyr Pro Gly Arg Ala Pro Lys Leu Ile  $180 \,\,$   $185 \,\,$   $190 \,\,$ 

Leu Tyr Glu Val Thr Asn Arg Pro Ser Gly Val Ile Asp Arg Phe Ser 195  $200\,$  205

Gly Cys Lys Ser Ala Asn Thr Ala Ser Leu Thr Val Ser Gly Leu Gln 210 215 220

Pro Asp Asp Glu Asp Thr Tyr Phe Cys Ser Ser Phe Ala Gly Ser Ser 225 230 235

Ser Phe Ala Gly Va1 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1560 <211> 250

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1560

Gin Vai Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Tyr Tyr Asp Ile Leu Thr Gly Tyr Asn Leu Phe Phe Asp 100 105 110

Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr  $130 \ \ \,$  135

Gln Pro Pro Ser Val Ser Gly Pro Pro Gly Gln Ser Ile Thr Ile Ser 145 150 150

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165 170 175

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly  $180 \ \ \, 185 \ \ \, 190$ 

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195  $200 \ 205$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<sup>&</sup>lt;210> 1561

<sup>&</sup>lt;211> 250

<sup>&</sup>lt;212> PRT <213> Homo sapiens

<sup>&</sup>lt;400> 1561

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 10 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 70 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Val Tyr Tyr Asp Ile Leu Thr Gly Tyr Asn Leu Phe Phe Asp 100 Tyr Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 \_\_ 135 Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 150 Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165 170 His Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 230 235

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1562

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1562

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  $50\,$ 

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95 \hspace{0.5cm}$ 

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \,$   $\,$   $110 \,$ 

Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu  $_{130}$   $_{135}$   $_{140}$ 

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $$150\$ 

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1563

<211> 250

<212> PRT <213> Homo sapiens

<400> 1563

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn Lys His

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr  $65 \phantom{000} 70 \phantom{000} 75 \phantom{000} 80 \phantom{000}$ 

Met Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu  $100 \hspace{1.5cm} 100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Asp Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Leu Pro Val

Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln Thr Ala Thr 145 150 150 160

Leu Thr Cys Gly Gly Thr Asn Phe Gly Arg Gln Ser Val His Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Ala Ile Tyr His Asp Asp  $180 \,$   $185 \,$   $190 \,$ 

Val Arg Pro Ser Gly Ile Pro Glu Arg Leu Ser Gly Ser Lys Ser Gly 195 200 205

Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala 210 215 220

Ala Tyr Tyr Cys Gln Val Trp Asp Ser Gly Ser Asp Val Val Val Phe 225 230 235

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1564

<211> 250

<212> PRT <213> Homo sapiens

<400> 1564

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn Arg His

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$ 

Gly Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys . 85 90 95

Ala Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Asp Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Pro Val 130 \$135\$

Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln Thr Ala Thr 145 \$150\$

Leu Thr Cys Gly Gly Thr Asn Phe Gly Arg Gln Ser Val His Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Ala Ile Tyr His Asp Asp 180 185 190

Val Arg Pro Ser Gly Ile Pro Glu Arg Leu Ser Gly Ser Lys Ser Gly 195  $200\ 205$ 

Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala 210  $\,$  220  $\,$ 

Ala Tyr Tyr Cys Gln Val Trp Asp Ser Gly Ser Asp Val Val Val Phe 225 230 235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1565 <211> 250

<211> 250 <212> PRT

<213> Homo sapiens

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn Lys His

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met \$35\$

Gly Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys - 90 95 85 Ala Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu 105 100 Asp Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 125 1.15 120 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val 135 130

Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr 150 155

Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Glu 185

Asn Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Ala Ser Ala Thr Leu Asp Ile Thr Gly Leu Gln Thr Gly Asp 215

Glu Ala Asp Tyr Tyr Cys Gly Thr Trp His Ser Ser Gln Val Val Phe 230 235 225

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1566 <211> 250

<212> PRT

<213> Homo sapiens

<400> 1566 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn Arg His 20

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met 35 40

Gly Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Asp Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val 130 135 140

Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr 145 \$150\$

Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Glu 180 185 190

Ser Gly Ala Ser Ala Thr Leu Asp Ile Thr Gly Leu Gln Thr Gly Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Gly Thr Trp His Ser Ser Gln Val Val Phe 225 230 235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1567 <211> 259

<212> PRT

<213> Homo sapiens

<400> 1567

Gln 1	Met	Gln	Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala	
Ser	Val	Lys	Va1 20	Ser	Сув	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Ser	Tyr	
Tyr	Met	His 35	Trp	Va1	Arg	Gln	A1a 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met	
Gly	Trp 50	Ile	Asn	Ala	Gly	Asn 55	Ser	Asn	Thr	Lys	Tyr 60	Ser	Gln	Lys	Phe	
Gln 65	Gly	Arg	Val	Thr	70	Thr	Ser	Asp	Thr	Ser 75	Ala	Ser	Thr	Ala	Tyr 80	
Met	Ğlu	Leu	Ser	Gly 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys	
Ala	Arg	Asp	Arg 100	Gly	Ala	Pro	Asn	Tyr 105	Asp	Ile	Leu	Thr	Gly 110	Tyr	Tyr	
Ala	Pro	Ala 115	Gln	Gly	Va1	Ala	Phe 120	Asp	Ile	Trp	Gly	Lys 125	Gly	Thr	Leu	
Ala	Thr 130		Ser	Ser	Gly	Gly 135	Gly	Gly	Ser	Gly	Gly 140	Gly	Gly	Ser	Gly	
Gly 145	Gly	Gly	Ser	Gln	Ser 150	Val	Leu	Thr	Gln	Pro 155	Pro	Ser	Val	Ser	Ala 160	
Ala	Pro	Gly	Gln	Lys 165	Val	Thr	Ile	Ser	Cys 170	Ser	Gly	Ser	Thr	Ser 175	Asn	
Ile	Gly	Asn	Asn 180	Tyr	Val	Ser	Trp	Tyr 185	Gln	Gln	His	Pro	Gly 190	Lys	Ala	
Pro	Lys	Leu 195	Met	Ile	Tyr	Asp	Val 200		Lys	Arg	Pro	Ser 205		Va1	Pro	
Asp	Arg 210		Ser	Gly	Ser	Lys 215		Gly	Asn	Ser	Ala 220	Ser	Leu	Asp	Ile	
Ser 225		Leu	Gln	Şer	Glu 230		Glu	Ala	Asp	Tyr 235		Cys	Ala	Ala	Trp 240	

Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr 245  $\phantom{0}250$   $\phantom{0}225$ 

Val Leu Glv

<210> 1568 <211> 244

<212> PRT

<213> Homo sapiens

<400> 1568

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg  $20 \\ 25 \\ 30$ 

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Lys Gly Thr Leu  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser 130  $$135\$ 

Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Arg Ser 145 \$150\$

Asn Ile Gly Ala Gly Tyr Asp Val His Trp Tyr Gln Gln Leu Pro Gly \$155\$ \$170\$

Thr Ala Pro Lys Leu Leu Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly

Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ala Ile Thr Gly Leu Gln Ala Asp Asp Glu Ala Asp Tyr Tyr Cys Gln 210 220

Ser Tyr Asp Thr Ser Leu Arg Gly Leu Phe Gly Thr Gly Thr Lys Val 225 230 235 240

Thr Val Leu Gly

<210> 1569

<211> 244

<212> PRT <213> Homo sapiens

<400> 1569

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg  $20 \\ 25 \\ 30$ 

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe  $65 \hspace{0.25in} 70 \hspace{0.25in} 75 \hspace{0.25in} 80$ 

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.25in} 90 \hspace{0.25in} 95$ 

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Gln Gly Thr Met 100  $$105\$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Ala Ser 130 135 140

Gly Thr Pro Gly Gln Arg Ala Thr Ile Ser Cys Ser Gly Ser Ser Ser 160

Asp Ile Gly Ile Asn Ala Val Asn Trp Tyr Lys Gln Leu Pro Arg Thr 165 170 175

Ala Pro Lys Leu Leu Ile Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val 180 185

Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205

Ile Ile Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr

Trp Asp Asp Ser Leu Thr Ala Tyr Val Phe Gly Thr Gly Thr Lys Val 225 230 235 240

Thr Val Leu Gly

<210> 1570

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1570 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 5

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 ... 25

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 90 85

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 105 1839

Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Ala Leu Pro Val Leu 130 \$135\$ . \$140

Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln Thr Ala Thr Leu 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Gln Lys Pro Gly Gln Ala Pro Val Leu Ala Ile Tyr His Asp Asp Val  $180\,$ 

Arg Pro Ser Gly Ile Pro Glu Arg Leu Ser Gly Ser Lys Ser Gly Asn 195 200 205

Tyr Tyr Cys Gln Val Trp Asp Ser Gly Ser Asp Val Val Val Val Phe Gly 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1571

<211> 249 <212> PRT

<213> Homo sapiens

<400> 1571

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35 \$40\$

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met  $65 \ 70 \ 75 \ 80$ 

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu 130 135 140

Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145 150 155 160

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp \$165\$

Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Glu Asn  $180 \hspace{1.5cm} 185 \hspace{1.5cm} 190 \hspace{1.5cm}$ 

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser  $195 \hspace{1cm} 200 \hspace{1cm} 205 \hspace{1cm} 205 \hspace{1cm}$ 

Gly Ala Ser Ala Ala Leu Asp Ile Thr Gly Leu Gln Thr Gly Asp Glu 210 215 . 220

Ala Asp Tyr Tyr Cys Gly Thr Trp His Ser Ser Gln Val Val Phe Gly 225 230 240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1572

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1572

Gln Val His Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15.

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gl<br/>n Ser Val Leu 130 \$135\$

Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}160\phantom{\bigg|}$ 

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp \$165\$

Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Glu Asn  $180 \,$   $185 \,$   $190 \,$  .

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 195  $200\,$  205

Ala Asp Tyr Tyr Cys Gly Thr Trp His Ser Ser Gln Val Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1573 <211> 249

<212> PRT <213> Homo sapiens

<400> 1573

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 100 105 110

Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu 130 135 140

Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145 \$150\$

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp \$165\$

Tyr Gln Gln Ile Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Glu Asn  $180\ \ \,$  185  $\ \ \,$  190

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 . 200 205  $_{\parallel}$ 

Ala Asp Tyr Tyr Cys Gly Thr Trp His Ser Ser Gln Val Val Phe Gly 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1574

<211> 250

<212> PRT <213> Homo sapiens

<400> 1574 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Val Asp Gly 35 40

Arg Asp Pro Pro Tyr Val Trp Tyr Ser Lys Leu Cys Thr Glu Val Pro 50 55

Arg Ala Glu Ser Arg Ser Pro Arg Thr Thr Leu Thr Asn Thr Val Tyr 70 65

Met Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys 90 85

Ala Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu 105 100

Asp Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly 120 115

Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Pro Val 135 140

Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln Thr Ala Thr 145

Leu Thr Cys Gly Gly Thr Asn Phe Gly Arg Gln Ser Val His Trp Tyr 165 170

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Ala Ile Tyr His Asp Asp 185 190 180 1844

Val Arg Pro Ser Gly Ile Pro Glu Arg Leu Ser Gly Ser Lys Ser Gly 195 200 205

Asn Thr Ala Thr Leu Thr Ile Ser Arg Val Glu Ala Gly Asp Glu Ala 210 215 220

Ala Tyr Tyr Cys Gln Val Trp Asp Ser Gly Ser Asp Val Val Val Phe  $225 \hspace{1cm} 230 \hspace{1cm} 235 \hspace{1cm} 235 \hspace{1cm} 240 \hspace{1cm}$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1575

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1575

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala  $20 \ 25 \ 30$ 

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 35  $\phantom{-}40\phantom{0}$  40  $\phantom{-}45\phantom{0}$ 

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln  $50 \ \ 55 \ \ 60$ 

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met  $65 \phantom{000} 70 \phantom{000} 75 \phantom{000} 80 \phantom{000}$ 

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu 130 135 140

Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Ile Ile 150 . 155 160 145

Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Pro Asp Tyr Asp Val His 170 175 165

Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Gly 190 180 185

Asn Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys 195 200

Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp 215 220 210

Glu Ala His Tyr Tyr Cys Gln Ser Tyr Gly Ser Ser Leu Ser Gly Val 230 235 240

Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<210> 1576

<211> 257

<212> PRT <213> Homo sapiens

<400> 1576

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 5 10

Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 25 20

Gly Ile Ser Tro Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40

Gly Trp Ile Ser Thr Tyr Asn Gly Asn Thr Arg Tyr Pro Gln Lys Leu 55

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 7.0

Met Asp Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90

Ala Arg Asp Gly Arg Leu Ser Tyr Asp Ile Leu Thr Gly Tyr Tyr Ala 100 105 110 1846

Arg Asp Tyr Tyr Gly Met Asp Asp Trp Gly Arg Gly Thr Met Val Thr  $115 \ 120 \ 125$ 

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly 130 135 140

Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro 145 150 155 160

Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly \$165\$

Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro  $180 \,$   $180 \,$   $185 \,$   $190 \,$ 

Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn \$195\$

Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser 210 215 220

Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 245  $\phantom{000}255$ 

Gly

<210> 1577

<211> 241

<212> PRT

<213> Homo sapiens

<400> 1577

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly	Gly 50	Ile	Ile	Pro	Ile	Phe 55	G1y	Thr	Ala	Asn	Tyr 60	Ala	Gln	Lys	Phe

Gln Gly Arg Val Thr Ile Thr Ala Asp Asp Leu Thr Arg Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Met Ser Ser Leu Lys Phe Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Ser Ser Glu Gly Thr Ile Phe Gly Val Asp Trp Gly Arg Gly Thr 100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Phe Leu 130  $$140\,$ 

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln 145 150 155 160

Gly Ile Asn Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Arg Ala 165 170 175

Pro Lys Leu Met Tyr Ala Ala Ser Ser Leu Gln Ser G1y Val Pro 180 185 190

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile 195 200 205

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Asp 210 215 220

Ser Asp Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Arg

<210> 1578 <211> 254

<211> 254 <212> PRT

<213> Homo sapiens

<400> 1578 Gin Val Gin Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu 1 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly 25 20 Tyr Tyr Trp Gly Trp Val Arg Gln Pro Pro Gly Gln Gly Leu Glu Trp 35 40 Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr His Asn Pro Ser Leu 50 55 Lys Ser Arg Val Thr Ile Ser Met Asp Thr Ser Lys Asn Gln Phe Ser 70 75 80 Leu Asn Leu Asn Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys 85 90 Ala Arg Gly Lys Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Arg Asp 100 105 110 Asn Trp Phe Asp Pro Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser 120 125 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 130 Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 150 Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 175 165 Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 185 190 180 Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 215 Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 235

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245\,$ 

<210> 1579 <211> 257 <212> PRT <213> Homo sapiens <400> 1579 Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 55 50 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 70 Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 85 Ala Arg Thr Pro Ser Ser Val Tyr Asp Leu Leu Thr Gly Tyr Tyr His 100 105 Tyr Phe Tyr Ser Tyr Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 135 Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro 150 145 Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly 165 170

Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Glu Ala Pro 180 185 190

Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn 195 200 205

Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser 210 ' 215 220

Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu 245 250 . 255

Glv

<210> 1580

<211> 242

<212> PRT

<213> Homo sapiens

<400> 1580

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Fro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Phe 20 25 30

Gly Ile Ser Trp Val Arg Gln Val Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Lys Gly Arg Val Thr Ile Ser Ala Asp Lys Leu Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Val Lys Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Thr Arg Glu Lys Ser Ala Ala Gly Tyr Phe Asp Tyr Trp Gly Lys Gly 100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Ser Thr 130 135 140

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser 145 150 150 160

Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Arg  $165\ ^{\circ}$   $170\ ^{\circ}$  170

Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser Thr Leu Glu Ser Gly Val

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr 195 200 205

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln 210 215 220

Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile 225  $\,$  230  $\,$  235  $\,$  240

Lys Arg

<210> 1581

<211> 250 <212> PRT

<213> Homo sapiens

\_

<400> 1581 Gin Val Gin Leu Gin Gin Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 . 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Gly Arg Ile Ile Pro Ile Val Asn Met Ala Asn Tyr Ala Gln Lys Phe  $50 \ \ 55 \ \ 60$ 

Gln Gly arg Val Thr Leu Thr Ala Asp Lys Ser Thr Gly Thr Ala Tyr 65 70 75 80

Met Glu Leu Thr Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $\phantom{000}$  85  $\phantom{000}$  90  $\phantom{000}$  95

Ala Arg Glu Asn Tyr Asp Ser Leu Thr Gly Tyr Tyr Gly Ala Phe Asp 100 . 105 110

Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr  $130 \ \ \, 135 \ \ \, 140 \ \ \,$ 

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 150 155 160

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165  $\phantom{0}$  170  $\phantom{0}$  175

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly  $180\,$ 

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1582 <211> 244

<211> 244 <212> PRT

<213> Homo sapiens

<400× 1593

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg  $20 \\ 25 \\ 30$ 

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Sly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Arg Gly Thr Leu  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 . 125

Gly Gly Gly Ser Ala Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser 130 135 140

Ala Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 150 155

Asn Ile Gly Ser Asn Tyr Val Tyr Trp Tyr Gln Gln Leu Pro Gly Thr 165 170 175

Ala Pro Lys Val Leu Ile Tyr Arg Asn Asn Gln Arg Pro Ser Gly Val  $180 \,$   $185 \,$   $190 \,$ 

Pro Asp Arg Phe Ser Gly Ser Arg Ser Gly Thr Ser Ala Ser Leu Ala 195 200 205

Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr  $210 \\ \hspace{1.5cm} 215 \\ \hspace{1.5cm} 220 \\ \hspace{1.5cm}$ 

Trp Asp Asp Ser Leu Ser Gly Pro Val Phe Gly Gly Gly Thr Lys Val 225 235 240

Thr Val Leu Gly

<210> 1583

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1583

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ile Cys Trp Arg Gln Ala Pro Ala Arg Gln Leu Glu Gly Met Ile 35 40 45

Gly Ile Leu Ile Met Tyr Gly Thr Ala Asp Tyr Ala Gln Lys Phe Gln 50  $\,$   $\,$  55  $\,$ 

Gly Arg Val Thr Ile Thr Ala Asp Asn Leu Thr Asn Thr Ala Tyr Met 65 70 75 80

Asp Leu Ser Ser Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Met Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu . 130 \$135\$

Thr Gln Pro Ala Ser Ala Ser Gly Ser Pro Gly Gln Arg Val Thr Ile 145 \$150\$

Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Ile Trp \$165\$

Trp Gln Gln Leu Pro Ala Ala Ala Ala Asn Leu Leu Met Tyr Ser Asn 180  $$185\$ 

Asn Arg Arg Pro Ser Gly Val Leu Glu Arg Phe Ser Gly Cys Lys Tyr 195 200 205

Gly Ala Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Gln Glu Asp Glu 210 215 220

Asp Val Ile Ile Thr Val Gln His Gly Met Pro Ala Leu Lys Gly Trp 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245 250

<sup>&</sup>lt;210> 1584 <211> 254

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 1.0 15 Ser Val Lys Val Ser Cys Gln Ala Ser Gly Gly Ser Phe Ser Arg Glu 20 25 Gly Ile Ser Tro Val Arg Gln Ala Pro Gly His Gly Leu Glu Trp Met 35 40 Gly Arg Ile Ile Pro Val Leu Gly Val Ala Asp Tyr Ala Gln Lys Phe 50 55 60 Gln Gly Arg Val Lys Ile Ser Val Asp Arg Leu Thr Ser Val Ala Tyr 70 75 80 Met Glu Leu Thr Ser Leu Arg Phe Glu Asp Thr Ala Val Tyr Tyr Cys 85 Ala Arg Glu Gly Met Asn Asp Phe Ile Asn Ser His His Tyr Tyr Thr 100 105 110 Met Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ala 135 Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp 170 Val His Trp Tvr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile 180 185 Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 200

Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala 210 215 220

Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser 225 230 235 240

Gly Ser Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1585

<211> 251

<212> PRT <213> Homo sapiens

<400> 1585

Glu Val Gln Leu Val Gln Ser Gly Ala Asp Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser His Tyr Pro Phe Thr Thr Tyr 20 25 30

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Leu Thr Thr Asp Thr Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Lys Ser Leu Thr Ser Asp Asp Thr Ala Ile Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Gly Asn Glu Tyr Gly His Thr Glu Arg Pro Ala Asp Tyr \$100\$

Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser  $115 \\ 120 \\ 125$ 

Gly Gly Gly Gly Ser Gly Gly Gly Ser Ala Gln Ala Val Leu Thr 130 135 140

Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser 145  $\phantom{000}$  150  $\phantom{000}$  155  $\phantom{000}$  . 160

Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val His Trp 165 170 175

Tyr Gln Gln Leu Pro Gly Thr Thr Pro Lys Leu Leu Ile Ser Arg Asn 180 185 185

Asn Asn Arg Pro Pro Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala Glu Asp Glu 210  $\phantom{-}$  215  $\phantom{-}$  220

Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Thr Thr Leu Arg Gly Trp Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly 245  $\phantom{0}$  250

<210> 1586

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1586

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165  $\phantom{0}$  170  $\phantom{0}$  175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \hspace{1cm} \rm 250 \hspace{1cm}$ 

<210> 1587

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1587

Glin Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{\rm 65}$   $_{\rm 70}$   $_{\rm 75}$   $_{\rm 80}$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130  $$\rm 140$ 

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser  $165 \hspace{1.5cm} 170 \hspace{1.5cm} 170 \hspace{1.5cm} 175$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \ \ \,$  185  $\ \ \,$ 

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys . 195  $200\,$  205

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Asp  $245 \ \ 250$ 

<210> 1588

<211> 248

<212> PRT <213> Homo sapiens

<400> 1588

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 . 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 9.0 95 Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 105 100 110 Asp Ile Trp Glv Gln Glv Thr Leu Val Thr Val Ser Ser Glv Glv Glv 120 125 115 Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140 Gin Asp Pro Ala Val Ser Val Ala Leu Gly Gin Thr Val Arg Ile Thr 145 150 155 Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln 165 170 175 Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg 180 185 Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 1.95 200 Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 215 Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 230 235 Gly Thr Lys Leu Thr Val Leu Asp 245 <210> 1589 <211> 246 <212> PRT <213> Homo sapiens <400> 1589 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Ser Tyr

Ala	Phe	Ser	Trp	Va1	Arg	Gln	Ala	Pro	G1y	Gln	Gly	Leu	Glu	Trp	Met
		35					40					45			

Gly Tyr Ile Val Pro Val Phe Gly Thr Ala Thr Tyr Ala Gln Asn Phe 5.0 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Ala Phe 65 70 75

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 9.0 95

Ala Arg Ser Leu Ala Thr Arg Pro Leu Gly Met Asp Val Trp Gly Arg 100 105 110

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

. Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser 130 135 140

Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr 145 150 155 160

Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His 165 170 175

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro 180 185

Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala 200

Ser Leu Thr Ile Ser Gly Leu Glm Ala Glu Asp Glu Ala Asp Tyr Tyr

Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr 225 230 235 240

Lys Leu Thr Val Leu Gly 245

<210> 1590 <211> 252 <212> PRT <213> Homo sapiens

<400> 1590 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1.0 5 15 Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 3.0 Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly 3.5 40 Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 55 60 Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 . 75 80 Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp 100 105 Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 120 . 125 115 Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr 150 Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn Ala Val Asn 165 Trp Tyr Arg Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Val Tyr Ser 180 185 Asn Asn Gln Val Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys 200 Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp 215 220

Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Gly Tyr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1591

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1591

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

. Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Met Gly  $35 \ \ 40 \ \ 45$ 

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln 50 60

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp  $100 \,$   $105 \,$   $\,$   $\,$   $110 \,$ 

Met Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Val 130 135 140

Thr Gln Fro Fro Ser Ala Ser Gly Thr Fro Gly Gln Arg Val Thr Val 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Cys Ser Gly Gly Arg Ser Asn Ile Gly Ser Asn Thr Val Ser Trp \$165\$

Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Ser Asn 180 185 190

Asp Glu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Asn Ser 195 200 -205

- Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu 220 210 215
- Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Asn Gly Val Ala 225 230 235

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

- <210> 1592
- <211> 251
- <212> PRT
- <213> Homo sapiens
- <400> 1592
- Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15
- Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Gly Tyr
- Asn Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
- Gly Trp Val Ser Pro Ser Asn Gly Asp Thr Ser Tyr Ala Gln Thr Phe 50 55 60
- Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 7.0 75
- Met Glu Leu Ser Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 85
- Ala Arg Asp His Phe Asp Thr Leu Thr Gly Tyr Phe Arg Arg Leu Asp 100 1.05
- Ser Trp Glv Gln Glv Thr Leu Val Thr Val Ser Ser Glv Glv Glv Glv - 115 120
- Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu 135
- Leu Thr Gln Asp Pro Glu Val Ser Val Ala Leu Gly Gln Thr Val Thr 145 150 155 160 1865

Ile Thr Cys Gln Gly Asp Ser Leu Ile Thr His Tyr Ala Ser Trp Phe \$165\$

Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Phe Tyr Ser Lys Asp 180 185 190

Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Tyr Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Arg Gly Lys Asn His Val Ala 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1593

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1593

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 . 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Val Tyr Tyr Asp Ile Leu Thr Gly Tyr Asn Leu Phe Phe Asp  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Tyr Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 135 140

Gin Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 150 150

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165 170 175

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 190

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1594

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1594

Gin Vai Asn Leu Arg Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ala Asn Ile Lys Gln Asp Gly Ser Glu Lys Tyr Tyr Val Asp Ser Val
50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Asp Ala Gln Ser Tyr Tyr Asp Ile Leu Thr Gly Tyr Gln Ser  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Tyr Ala Phe Asp Ile Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser  $115 \\ 120 \\ 125$ 

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser 130 135

Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val 145 \$150\$

Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp 165 170 175

Phe Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys 180 185 190

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1595

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1595

Gln Val Gln Leu Val Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $$^35$$ 

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Tyr Tyr Asp Ile Leu Thr Gly Tyr Asn Leu Phe Phe Asp 100 105 110

Tyr Trp Gly Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 140

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 155 160

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly  $180 \,$   $185 \,$  190

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195  $200\,$  205

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210  $\phantom{-}215\phantom{+}$ 

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1596

<211> 257 <212> PRT

<213> Homo sapiens

<400> 1596 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 15 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Gly Lys Tyr 3.0 Ala Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45 Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe 50 55 60 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr 65 70 7.5 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 9.0 Ala Arg Gly Pro Ser Thr Thr Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr 105 100 Thr Pro Tyr Tyr Tyr Tyr Tyr Met Asp Val Trp Gly Gln Gly Thr 115 120 125 Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 135 140 Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val 150 155 Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg 200

Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly 210 220

Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$  240

Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu  $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255$ 

Gly

<210> 1597

<211> 255 <212> PRT

<213> Homo sapiens

<400> 1597

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Ser Ser Gly 1  $\phantom{-}$  15

Asp Tyr Phe Trp Thr Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu 35 40 45

Trp Ile Gly Glu Ile Asn His Arg Gly Asp Ile Asn Tyr Asn Pro Ser  $50 \\ 0 \\ 0 \\ 1$ 

Leu Lys Ser Arg Val Thr Ile Leu Val Asp Thr Ser Lys Asn Gln Leu 65 70 75 80

Ser Leu Lys Leu Asn Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Cys Ala Arg His Val Arg Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Arg  $100 \\ 105 \\ 110$ 

Gly His Tyr Phe Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser  $115 \ \ \, 120 \ \ \, 125$ 

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 130 135 140

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn

Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu Leu 180 185 190

Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln 210 215 220

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu 225 230 235 240

Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1598

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1598

Gly Val Gln Leu Val Gln Ser Gly Ala Val Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Asn Asn  $20 \\ 25 \\ 30$ 

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Gly Ile Ile Pro Val Phe Glu Thr Ile Asn Thr Ala Gln Lys Phe  $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Val Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Glu Arg Gly Val Val Thr Ala Tyr Gly Gly Asp Ser Phe Asp  $100 \hspace{1cm} 105 \hspace{1cm} 110$ 

Leu Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 140

Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser 145 150 155 160

Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr  $165 \\ 170 \\ 175$ 

Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly 195  $200\,$  205

Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala 210 . 215 . 220

Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe 225 230  $\cdot$  235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Ser 245 250

<210> 1599

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1599

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ser 1 10 15

Ala Leu Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Tyr Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Arg Gly Arg Ile Thr Ile Thr Ala Asp Glu Leu Thr Asn Thr Ala Tyr 65 70 75  $\cdot 80$ 

Met Glu Leu Ser Ser Leu Thr Ser Asp Asp Ser Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Gly Pro Gly Leu Leu Ser Ser Phe Phe Glu Ser Trp

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly 125 120

Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro 135 140

Ala Ser Val Ser Gly Ser Arg Gly Gln Ser Ile Thr Ile Ser Cys Thr 145

Gly Thr Thr Gly Asp Val Gly Gly Tyr Asp Tyr Val Ser Trp Tyr Gln 165

Gln His Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Gly Asn Ser Asn 180

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Ala Ser Lys Ser Gly Asn 205

Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Phe Cys Ser Thr Tyr Ala Pro Pro Gly Ile Ile Met Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1600

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1600

Gln Val Arg Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 45

Gly Arg Ile Ile Pro Ile Leu Gly Ile Ala Asn Tyr Ala Gln Lys Phe 50 - 55 10/н

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr 7.0 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Glu Tyr Tyr Asp Ile Leu Thr Gly Tyr Gln Ala Pro Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val 115 120 Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 135 140 Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly 145 150 155 160 Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser 165 170 175 Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala Ala Pro Gln Leu 180 185 190

Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe
195 200 205

Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu 210 215 220

Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser 225 230 235 240

Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 . 255

<sup>&</sup>lt;210> 1601

<sup>&</sup>lt;211> 250

<sup>&</sup>lt;211> 230

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;400> 1601

Gln Val Gln Leu Gln Gln Ser Gly Ala Val Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Asn Asn

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val \$35\$ \$40\$

Gly Gly Ile Ile Pro Val Phe Glu Thr Ile Asn Thr Ala Gln Lys Phe 50

Gln Gly Arg Ala Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Val Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Thr Glu Arg Gly Val Val Thr Ala Tyr Gly Gly Asp Ser Phe Asp  $100 \\ 0.05$ 

Leu Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 135 140

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 \$150\$

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp \$165\$ \$170\$

Tyr Gln Gln His Pro Gly Glu Ala Pro Lys Leu Met Ile Tyr Glu Gly 180  $$185\ \ \ \$ 

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225 230 235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250$ 

<210> 1602 <211> 253

<212> PRT <213> Homo sapiens

<400> 1602

Glu Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Glu Asn 2.0 25

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile

Gly Glu Ile Thr His Ser Gly Asn Thr His Tyr Asn Pro Ser Leu Lys 50 55 60

Ser Arg Val Ser Ile Ser Val Asp Ala Ser Lys Asn Gln Phe Ser Leu 7.0 75 80 65

Lys Leu Ser Ser Val Ser Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Arg Asp Val Thr Tyr His Asp Ile Leu Thr Gly Tyr Ala Gly His Glu 105 100 110

Ala Phe Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser 130 135

Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr 165 170 175

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185

Tyr Glu Gly Ser Lys Arg Pro Ser Gly Ala Ser Asn Arg Phe Ser Gly

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala 210 215 1877

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 225 230 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1603

<211> 255 <212> PRT

<213> Homo sapiens

<400> 1603

Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  $1 ag{10}$  15

- Thr Leu Ser Leu Ser Cys Ala Ile Ser Gly Asp Ser Val Gly Ser Asn  $20 \\ 25 \\ 30$ 

Gly Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu 35 45

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Gln Trp Tyr Ser Asp Tyr Gly 50 60

Ala Ser Val Arg Ser Arg Ile Thr Ile Asn Ala Asp Thr Ser Lys Asn 65 70 75 80

Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val 85 90 95

Tyr Tyr Cys Ala Arg Glu Ser Gly Arg Tyr Asp Ile Leu Thr Gly Tyr 100 . \$105 . \$110

Tyr Ser Gly Gly Gly Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val 115 120 125

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly 130 135 140 .

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Gly Ile 165 170 175

Tyr His Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
180 185 190

Leu Leu Tle Tyr Lys Ala Ser Ser Leu Ala Ser Gly Ala Pro Ser Arg  $195 \hspace{1.5cm} 200 \hspace{1.5cm} 205 \hspace{1.5cm}$ 

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser 210 215 220

Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Asn 225 230 235 240

Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg 245 250 255

<210> 1604

<211> 256

<212> PRT - -

<213> Homo sapiens

<400> 1604

Gln Val Thr Leu Lys Glu Ser Gly Gly Gly Leu Gly Gln Pro Gly Arg 1  $\phantom{0}$  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Ser Tyr 20 25 30

Glu Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Leu 35 40 45

Ser Tyr Ile Ser Ser Asp Gly Thr Thr Lys Tyr Tyr Ala Asp Ser Val $50 \\ 0 \\ 60$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asp Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Asp Asp Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Arg Asp Gly Ala Asn Tyr Asp Ile Leu Thr Gly Tyr Tyr Thr Thr 100 105 110

Thr Val Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val 115 120 125

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Gly 130 135

Ser Arg Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 145 150 155 160

Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 165 170 175

Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys 180 185 190

Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg  $_{-}$  195  $_{-}$  200  $_{-}$  205

Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 210 220

Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 225 230 235 240

<210> 1605

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1605

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly .  $1 \quad , \qquad 5 \qquad \qquad 10 \qquad \qquad 15$ 

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Gln Glu Trp Val \$35\$

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val $50 \\ 60$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Arg Ser Tyr Asp Ile Leu Thr Gly Tyr Tyr Thr Tyr Gly Met

Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 120 \$125\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser  $165 \\ 0.00 \\ 170 \\ 0.00 \\ 175$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys  $195 \hspace{1cm} 200 \hspace{1cm} 205 \hspace{1cm}$ 

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 · 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1606

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1606

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Lys Pro Asn Ser Ala Gln Arg Phe 50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Gly Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Ala Glu Gly Ser Ser Gly Tyr Leu Val Gly Trp Gly Arg Gly Thr  $100 \,$   $\,$   $110 \,$ 

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser 130 135 140

Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly \$165\$

Thr IIe Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser 210 215 220

Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Thr Val Leu Gly

<210> 1607

<211> 256

<212> PRT <213> Homo sapiens

<400> 1607

Gln Val Gln Leu Gln Glu Ser Gly Ser Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Ile Ser Ser Gly \$25\$

Gly Tyr Ser Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu  $35^{\circ}$  40 45

Trp Ile Gly Tyr Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser  $50 \\ 0 \\ 55$ 

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Arg Ser Lys Asn Gln Phe  $65 \phantom{\bigg|} 70 \phantom{\bigg|} 75 \phantom{\bigg|} 75$ 

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Cys Ala Arg Lys Gln Arg Gly Asp Tyr Asp Ile Leu Thr Gly Tyr Gln  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Leu Gly Tyr Ala Phe Asp Ile Trp Gly Arg Gly Thr Pro Val Thr Val 115 120 125

Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}$  . 155  $\phantom{\bigg|}160\phantom{\bigg|}$ 

Gln Lys Val Thr İle Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn 165 175

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu 180 185 190

Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Ser Gly Ser Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu 210 220

Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1608 <211> 255 <212> PRT

<213> Homo sapiens

<400> 1508
Gin Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ile Phe Ser Ser Tyr 20 25 30

Thr Met Asn Trp Val Arg Gin Aia Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ser Ile Ser Ser Gly Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Met 50 55 60

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Arg Glu Arg Pro Gly Tyr Asp Ile Leu Thr Gly Tyr Pro Ser Ser 100 105 110

Ile Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Pro Val Thr Val Ser 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 130 135 140

Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr \$165\$ \$170\$

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu 180 185 190

Met Ile Tyr Glu Gly Gly Lys Arg Pro Ser Gly Val Ser Asn Arg Phe 195 200 205

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu 210 215 220

Gin Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Ser Thr Arg Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1609

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1609

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 105 \\ 110$ 

Asp Ile Trp G1y G1n Gly Thr Met Val Thr Val Ser Ser Gly G1y G1y  $115 \\ 120 \\ 125$ 

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr ,  $130 \hspace{1.5cm} 135 \hspace{1.5cm} 140 \hspace{1.5cm}$ 

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 175 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1610

<211> 257 <212> PRT

<213> Homo sapiens

<400> 1610

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Lys Tyr Ala Gln Glu Leu . 50 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Asp Thr Leu Gly Tyr Asp Ile Leu Thr Gly Tyr Pro Pro Pro 100 105 110

Tyr Tyr Tyr Tyr Asp Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr 115 120 125

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 130 135 140

Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro 145 \$150\$

Gly Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly 165 170 175

Asn Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys  $180 \\ 185 \\ 190$ 

Leu Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg 195 200 205

Phe Ser Asp Ser Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly 210 215 220

Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 245 250 255

Gly

<210> 1611

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1611

Ala Val Gln Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val 1  $\phantom{-}$   $\phantom{-}$  10  $\phantom{-}$  15

Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Gly Ile Ser Trp  $20 \ 25 \ 30$ 

Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Ser 35 40 45

Ala Tyr Asn Gly Asn Thr Lys Tyr Ala Gln Glu Leu Gln Gly Arg Val $50 \\ 0 \\ 60$ 

Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu Leu Arg 65  $\phantom{0}70$   $\phantom{0}75$ 

Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Thr

Leu Gly Tyr Asp Ile Leu Thr Gly Tyr Pro Pro Pro Tyr Tyr Tyr Tyr 100 105 110

Asp Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser 130  $\,\cdot\,$  135  $\,$  140

Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val 145 150 155 160

Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val  $165 \ 170 \ 175$ 

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Asp Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu 225 230 235 240

Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1612

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1612

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gln 1 5 10 15

Ser Leu Arg Leu Ser Cys·Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Asp Met His Trp Val Arg Gln Ala Thr Gly Glu Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Gly Thr Ala Gly Asp Thr Tyr Tyr Pro Gly Ser Val Lys 55

Gly Arg Phe Thr Ile Ser Arg Glu Asn Ala Lys Asn Ser Leu Tyr Leu 70

Gln Met Asn Ser Leu Arg Ala Gly Asp Thr Ala Val Tyr Tyr Cys Ala

Arg Gly Arg His Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Asn Glu Ala 100 105

Phe Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly . 115 120

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val 135 140 130

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 150 155 160 145

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 200

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<sup>&</sup>lt;210> 1613 <211> 250

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;400> 1613

Glu Val Gin Leu Vai Glu Thr Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 7.0 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly Asn Tyr Tyr Asp Val Leu Thr Gln Ser Tyr Tyr Gly Met Asp 100 105 Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 135 Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145 155 Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165 170 175 Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 190 Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225 235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1614

<211> 243 <212> PRT

<213> Homo sapiens

<400> 1614

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Glu Pro Gly Ala 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Phe 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr  $65 \phantom{000} 70 \phantom{000} 75 \phantom{000} 75$ 

Met Glu Leu Ser Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly 130 135

Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn  $145^{\circ}$  150 155 160

Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly Ala Ala 165 170 175

Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro 180 185 190

Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile 195 200 205

Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp 210 215 220

Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Leu Gly

<210> 1615

<211> 245

<212> PRT <213> Homo sapiens

<400> 1615

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Ser Phe Lys Ser His  $20 \\ 25 \\ 30$ 

Ser Leu Thr Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Gly Val Leu Pro Val Phe Gly Met Val Asp Ser Ala Gln Arg Phe 50 60

Gin Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Gly Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Gly Gly Val Thr Ala Gly Arg Ser Val Tyr Phe Asp Ser Trp \$100\$

Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro 130 135 140

Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly 145 150 150 155

Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly \$165\$ . \$170\$

Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly 180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu 195 200 205

Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn 210 215 220

Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Leu Thr Val Leu Gly 245

<210> 1616

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1616

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Ala Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Ile Phe Arg Ser Tyr 20 25 30

Pro Ile Ser Trp Val Arg Gln Ala Pro Gly Leu Gly Leu Glu Trp Ile \$35\$

Gly Gly Ile Ile Pro Ile Val Gly Lys Pro Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Asp Arg Val Ala Ile Ser Ala Asp Glu Leu Thr Thr Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ser Pro Asn Gly Asp Tyr Ser Gly Tyr Ala Trp Gly Leu Glu 100 105 110

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 145  $$150\$ 

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp  $165 \\ 170 \\ 175$ 

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 190

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 205 .

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe  $225 \\ 230 \\ 235 \\ 240$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1617

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1617

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Glu Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Lys Tyr
20 25 30

Ala Val Ser Trp Leu Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Thr Pro Phe Ala Thr Thr Lys Tyr Ala Gln Lys Phe Gln 50 55 60

Gly Arg Ala Thr Ile Thr Ala Asp Glu Leu Thr Asn Thr Val Tyr Met  $65 \phantom{0000} 70\phantom{0000} 75\phantom{0000}$  80

Asp Leu Gly Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala 85 90

Ser Tyr Phe Asp Gly Ser Gly Tyr Tyr Pro Val Ser Phe Ser Tyr Trp 110 105

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly 120

Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro 135 140

Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr 145

Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln 165 170 175

Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys 180

Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Glu Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp 215 210

Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1618

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1618

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Ala Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Asn Tyr 20 25

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile 35 40 45 1895

Gly Glu Ile Tyr His Ser Gly Thr Ala Ser Tyr Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu 65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \\ 90 \\ 95$ 

Arg Val Asn Tyr Asp Ile Leu Thr Gly Leu Gly Tyr Tyr Phe Asp Tyr  $100 \\ 105 \\ 110$ 

Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln 130 135 140

Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys 145 150 155 160

Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln
165 170 175

Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys 180 185 190

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn 195  $\phantom{\bigg|}200\phantom{\bigg|}$  200  $\phantom{\bigg|}205\phantom{\bigg|}$ 

Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly 225 230 235 240

Thr Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1619

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1619

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu 35 Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser 55 Leu Lys Ser Arg Val Thr Ile Ser Ile Asp Thr Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Val Arg Ser Tyr Tyr Asp Ile Leu Thr Gly Arg Pro Tyr Thr Asp 100 Ala Phe Asp Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly 120 115 Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser 135 130 Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 155 160 1.45 150 Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr 170 175 1.65 Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 185 Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly 200 Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 230 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1620 <211> 249

<212> PRT <213> Homo sapiens

<400> 1620

Gly Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Gly Thr Phe Ser Thr His 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Glu Ile Ile Pro Met Ser Ala Thr Thr Arg Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Leu Thr Ile Ile Ala Asp Glu Leu Thr Ser Thr Val His 65 70 75 80

Met. Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95 \hspace{0.5cm}$ 

Ala Arg Pro Leu Gly Ile Thr Ala Val Arg Gly Ala Lys Thr Asp Ala 100 105 110

Phe Gly Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly
115 120 125

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145 \$150\$

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln 165 170 175

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1621

<211> 256

<212> PRT

<213> Homo sapiens

400> 1621

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  $1 ext{5}$   $10 ext{15}$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ala Thr Tyr
20 25 30

Ala Met Gln Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Leu  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$ 

Gly Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Phe  $50 \,$ 

Gln Gly Arg Val Thr Ile Thr Ser Asp Thr Ser Ala Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Gly Ala Ser Asn Tyr Asp Ile Leu Thr Gly Tyr Tyr  $100 \ \ 100 \ \ \ 105$ 

Ala Pro Ala Gln Gly Val Ala Phe Asp Ile Trp Gly Arg Ser Thr Leu 115  $$120\$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 130 135 140

Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala 145 150 155 160

Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser 165 170 175

Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu 180 185 190

Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe 195 200 205

Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala  $^{\circ}$  210  $^{\circ}$  220  $^{\circ}$ 

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \hspace{1.5cm} 250 \hspace{1.5cm} 255$ 

<210> 1622

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1622

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $65\cdot 70$  75

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 \$185\$

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1623

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1623

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \\ 25 \\ 30$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 .70 .75 .80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe
100 105 110

Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr 130 135

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 175 \$175\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg  $^{\dagger}$  180 \$180

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly . 245

<210> 1624

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1624

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 105 \\ 110$ 

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 175 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr \$195\$

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 \$230\$

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1625

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1625

Gly Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly 1 10 15 15 15  $^{\circ}$ 

Ser Leu Arg Leu Ser Cys Ala Gly Ser Gly Phe Thr Phe Ser Asp Tyr

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Tyr Ile Ser Asn Asn Ser Ser Tyr Thr Asn Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Thr Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Leu Gln Met Asn Asn Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gln  $130 \\ {\rm 135} \\ {\rm 140}$ 

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145 150 155 160

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn  $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$ 

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 185 190

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Ala'Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 235 240

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1626

<211> 255 <212> PRT

<213> Homo sapiens

<400> 1626

Gln Val Gln Leu Gln Gln Trp Gly Ala Glu Leu Leu Lys Pro Ser Glu 10

Thr Leu Ser Leu Asn Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr 20 25

Tyr Trp Ser Trp Val Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Ile 40

Gly Glu Ile Lys His Gly Gly Gly Thr Asn Tyr Asn Pro Ser Leu Lys 50 55 60

Ser Arg Val Ser Ile Ser Leu Asp Thr Ser Lys Asn Gln Phe Ser Leu

Lys Met Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala

Arg Trp Ala Thr Tyr Tyr Asp Thr Leu Thr Gly Tyr Arg Leu Lys Asp 100 105 110

His Ala Gly Phe Asp Ile Trp Gly Arg Gly Thr Thr Val Thr Val Ser 115 120 125

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser 130 135 140

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Ser Pro Gly Gln 145

Ser Val Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr 175

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu 180 185 190

Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe 195 200 205 1905

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu 210 215 220

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg 225 230 235 240

<210> 1627 <211> 252

<211> 232

<213> Homo sapiens

<400> 1627

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ser Pro Gly Asp Asp Ile Leu Thr Gly Tyr Tyr Lys Tyr Tyr 100 \$105\$

Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155 160

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 . 170 . 175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 205

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1628

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1628

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg

1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr Ser Tyr 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ala Asp Ile Ser Tyr Asp Gly Thr Lys Glu Phe Tyr Ala Asp Ser Ala 50 55 60

Arg Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Arg Asn Thr Val Tyr 65 70 75 80

Leu Gln Val Asn Ser Leu Gly Val Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \phantom{\bigg|}90$ 

Ala Thr Asp Ala Gly Glu Ser Tyr Asp Ile Leu Thr Gly Tyr Tyr Val 100 105 110

Ile Glu Gly Tyr Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val 115 120 125

Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln 145 150 150 160

Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala  $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$ 

Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr 180 185 190

Gly Lys Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser 195  $200\,$  205

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1629

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1629

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Lys Tyr Tyr 20 25 30

Thr Tyr Ser Trp Ile Arg Gln Ala Pro Gly Gln Trp Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Gly Ile Asn Pro Ile Arg Gly Thr Ala Asn Tyr Ala Gln His Phe 50

Arg Gly Arg Val Thr Ile Ile Ala Asp Glu Leu Thr Ser Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Gly Leu Gly Ser Asp Asp Thr Ala Val Tyr Phe Cys 85 90 95

Ala Thr Glu Gly Ala Ala Asp Tyr Leu Asn Gly Gln Tyr Phe Gln His  $100 \hspace{0.5in} 105 \hspace{0.5in} 105$ 

Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 \$120\$

Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys  $145 \hspace{1.5cm} 150 \hspace{1.5cm} 155 \hspace{1.5cm} 160$ 

Thr Gly Thr Ser Ser Asp Ile Gly Gly Tyr Asn Tyr Val Ser Trp Tyr 165 170 175

Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser 180 185 190

Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1630

<21.1> 246

<212> PRT

<213> Homo sapiens

<400> 1630

Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}5\phantom{+}$  10  $\phantom{-}15\phantom{+}$ 

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Asn Thr His  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Ile Thr Met Thr Thr Asp Thr Leu Thr Ser Thr Ala Phe 65 70 75 80

Met Glu Leu Lys Ser Leu Arg Ser Asp Asp Thr Gly Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Gly Ser Trp Ser Gly Leu Asp Leu Asp Tyr Trp Gly Gln  $100 \,$   $105 \,$   $110 \,$ 

Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro Ser 130 140

Ala Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser 145 150 155 160

Ser Ser Asn Ile Gly Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro\$165\$ \$170\$

Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser 195  $200\,$ 

Leu Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Ala Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr 225 230 235 240

Lys Leu Thr Val Leu Gly

<210> 1631

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1631

Gln 1	Val	Gln	Leu	Gln 5	Gln	Ser	Gly	Ser	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Lys	Tyr
Thr	Met	His 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Pro 45	Glu	Trp	Met
Gly	Trp 50	Ile	Asn	Gly	Gly	Ser 55	Gly	Asp	Thr	Lys	Tyr 60	Ser	Arg	Lys	Phe
G1n 65	G1y	Arg	Val	Thr	Ile 70	Thr	Lys	Asp	Thr	Ser 75	Ala	Ser	Ala	Ala	Tyr 80
Met	G1u	Leu	Ser	Ser 85	Leu	Gly	Ser	Glu	Asp 90	Thr	Ala	Leu	Tyr	Tyr 95	Cys
Ala	Arg	Ala	Thr 100	Tyr	Asp	Pro	Leu	Thr 105	Gly	Tyr	Ser	Phe	Asp 110	Gly	Phe
Asp	Ile	Trp 115	Gly	<b>Gl</b> n	Gly	Thr	Met 120	Val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Gln	Ser	Val	Leu
Thr 145	Gln	Pro	Pro	Ser	Ala 150	Ser	Gly	Thr	Pro	Gly 155	Gln	Arg	Va1	Thr	Ile 160
Ser	Cys	Ser	Gly	Ser 165	Ser	Ser	Asn	Ile	Gly 170	Ser	Asn	Thr	Va1	Asn 175	Trp
Tyr	Gln	Arg	Leu 180	Pro	Gly	Ala	Ala	Pro 185	Gln	Leu	Leu	Ile	Tyr 190	Asn	Asp
Asp	Gln	Arg 195	Pro	Ser	Gly	Ile	Pro 200	Asp	Arg	Phe	Ser	Gly 205	ser	Lys	Ser
Gly	Thr 210	Ser	Ala	Thr	Leu	Gly 215	Ile	Thr	Gly	Leu	Gln 220	Thr	Gly	Asp	Glu
Ala 225	Asp	Tyr	Tyr	Cys	Gly 230	Thr	Trp	qaA	Ser	Ser 235	Leu	Ser	Gly	Gly	Leu 240

Ser Val Phe Gly Ala Gly Thr Lys Val Thr Val Leu Gly

<210> 1632

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1632
Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Gln Thr Ser Gly Thr Thr Phe Arg His Ser  $20 \\ 25 \\ 30$ 

Ala Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Phe Glu Trp Leu  $35 \ 40 \ 45$ 

Gly His Ile Ile Pro Val Phe Glu Thr Ala His Leu Ser Asp Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Val Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 75$ 

Ala Arg Val Ser Gly Tyr Asn Ser Gly Tyr Phe Glu Ser Tyr Asp Met  $100 \\ 105 \\ 110$ 

Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135

Thr Gln Pro Thr Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $$150\$ 

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys  $195 \hspace{1cm} 200 \hspace{1cm} 205 \hspace{1cm}$ 

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Ala Gly Ser Asn Gly Val Phe 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1633

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1633

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Glu Arg Thr Val Arg Thr Ser  $20 \\ 25 \\ 30$ 

Asp Ile Ser Trp Ile Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 35 40 45

Gly Met Ile Ile Pro Ile Phe Gly Thr Thr Thr Tyr Ala Gln Gln Phe 50

Gln Gly Arg Val Ser Ile Asp Val Asp Ala Leu Thr Ser Thr Ser Val 65 70 75 80

Leu Glu Leu Gly Ser Leu Thr Pro Glu Asp Thr Ala Ile Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Thr Gln Gly Gly Gln Tyr Asp Ser Pro Pro Leu Asp Val Trp Gly
100 105 110

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 150 155 160

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1634

<211> 252

<212> PRT <213> Homo sapiens

Tara nomo bagacin

<400> 1634
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Tyr Ile Ser Arg Ser Ser Arg Ser Ile Tyr Tyr Ala Asp Ser Val $50 \\ 60$ 

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Asp Arg Asp Tyr Asp Ile Leu Thr Asp Tyr Ser Asn Tyr Gly  $100 \ 105 \ 110$ 

Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195  $200\,$  205

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1635

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1635

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 25 30

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Ala Pro Leu Tyr Asp Ile Leu Thr Gly Tyr Tyr Ile Gly Gly
100 105 110

Asn Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Arg Gly Gly

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val 130 135

Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly Asp Arg Val 145 \$150\$

Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Tyr Leu Ala Trp \$165\$ 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala , 180 180 180 190

Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser 195  $200\,$ 

Ala Thr Tyr Tyr Cys Glu Asn Tyr Asn Ser Val Pro Leu Ser Phe Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1636

<211> 253

<212> PRT <213> Homo sapiens

<400> 1636

Gln Val Gln Leu Val Gln Ser Gly Ala Gly Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Lys Asp Tyr Asp Ile Leu Thr Gly Tyr Trp Arg Asp Glu  $100 \\ 105 \\ 110$ 

Leu Leu Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly  $115 \\ 120 \\ 125$ 

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser  $130 \ \ \, 140$ 

Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145 \$150\$

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr 165 170 175

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185 190

Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly 195 200 205

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 225 \$230\$ 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1637

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1637

Glm Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Fro Gly Gly

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg His
20

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35

Ser Gly Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Gly Asp Leu Val
50

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65

To

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
90

Ala Lys Asp Pro Asn Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr Ala
100

Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly
115

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 130 135 140

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195  $200 \,$  205

Glu Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 . 250

<210> 1638 <211> 246

<211> 246 <212> PRT

<213> Homo sapiens

<400> 1638

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Glu Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Thr Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Glu Phe Asp Gln Leu Leu Ala Arg Gly His Gly Met Asp Val  $100 \\ 105 \\ 110$ 

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser 115  $$120\$ 

Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp \$130\$

Pro Pro Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln 145 150 155

Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys Pro 165 170 175

Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro Ser  $180 \,\,$   $185 \,\,$  190

Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser  $195~^{\circ}$   $^{\circ}$   $200~^{\circ}$   $205~^{\circ}$  .

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly Thr 225 230 235

Lys Leu Thr Val Leu Gly

<210> 1639 <211> 244

<212> PRT

<213> Homo sapiens

Glu Val Gin Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr-  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly 100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 125

Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala 130 135 140

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp 145 150 155 160

Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gin Gin Lys Pro Gly Gin 165 170 175

Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro Ser Gly Ile 180 185 190

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr 195 200 205

Ile Thr Gly Val Gln Ala G1u Asp Glu Ala Asp Tyr Tyr Cys His Ser  $210 \\ 215 \\ 220$ 

Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly Thr Lys Leu 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Val Leu Gly

<210> 1640

<211> 256 <212> PRT

<213> Homo sapiens

<400> 1640

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Fhe Thr Gly Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50

Gln Gly Trp Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Arg Gly Ser Tyr Asp Ile Leu Thr Gly Tyr Tyr Arg Pro  $100 \\ 100 \\ 110$ 

Gly Asp Gly Tyr Phe Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val 115 120 125

Ser Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly 135

Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 150

Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 165 170

Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys 180 185 190

Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg 195 200 205

Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly 210 215 220

Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 225

Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1641

<211> 249 <212> PRT

<213> Homo sapiens

<400> 1641

Gln Val Gln Leu Gln Gln Ser Gly Ala Lys Val Lys Arg Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Arg Pro Ser Gly Ala Thr Phe Ser Gly Tyr 20 25

Ala Leu Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Leu 35 40

Gly Arg Ile Ile Pro Ile Leu Gly Thr Ser Asn Phe Ala Gln Lys Phe 55 50

Gln Asp Arg Leu Thr Met Ser Ala Asp Glu Leu Thr Ser Thr Val Tyr 65 70

Met Glu Leu Asp Ser Leu Thr Ser Glu Asp Thr Ala Ile Tyr Tyr Cys

Ala Arg Gly Leu Tyr Phe Glu Asp Thr Asn Tyr Arg His Gly Asp Ala

Phe Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu 130 \$135\$

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145  $\phantom{00}$  150  $\phantom{00}$  155  $\phantom{00}$  160

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln
165 170 175

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235

Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1642

<211> 255

<212> PRT

<213> Homo sapiens

<400> 1642

Gin Vai Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu 1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr 20 25 30

Tyr Trp Ser Trp Ile Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Ile 35 40 . 45

Gly Glu Ile Asn His Gly Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys 50

Ser Arg Val Thr Ile Ser Val Asp Ala Ser Lys Asn Gln Phe Ser Leu 65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Arg Glu Arg Ser Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Pro Arg Ser  $100 \hspace{1cm} 105 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 145 \$150\$

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn 165 170 175

Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu Val Ile Ser Gly Leu Gln 210 215

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

As nGly Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 255

<210> 1643

<211> 248

<212> PRT <213> Homo sapiens

<400> 1643

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 25 Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 40 Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125 Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205 Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1644

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1644

Lys Val Gln Leu Val Gln Ser Gly Ala Val Val Lys Lys Pro Gly Ser 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Asn Asn 20 25

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val 40 45

Gly Gly Ile Ile Pro Val Phe Glu Thr Ile Asn Thr Ala Gln Lys Phe

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Ala Tyr 70 75 80

Met Glu Leu Ser Ser Leu Arg Val Asp Asp Thr Ala Val Tyr Tyr Cys

Ala Thr Glu Arg Gly Val Val Thr Ala Tyr Gly Gly Asp Ser Phe Asp 100 105

Leu Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115

Ser Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr 130 135 140

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 150 155 160 145

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165 170 175

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 180 185 190

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195 200 205 1926

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215 Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 230 235 Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1645 <211> 250 <212> PRT <213> Homo sapiens <400> 1645 Gln Val Gln Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Pro Glu 1.0 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Gly Ser Leu Asn Gly Tyr Tyr Trp Gly Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile 35 Gly Glu Thr Asn His Arg Gly Thr Thr Asn Tyr Asn Pro Ser Leu Lys 50 55 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn His Val Leu Leu 65 Arg Met Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala 85 Arg Arg Tyr Ser Asp Ala Leu Thr Gly Tyr Ser Leu Gly Ala Phe Asp 100 1.05 1.10 Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125 Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 140 135 Gln Pro Ala Ser Val Ser Glv Ser Pro Glv Gln Ser Ile Thr Ile Ser 145 150 160

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 215

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 235

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1646

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1646

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Thr Phe 2.0

Asn Ser Ser Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu

Glu Trp Met Gly Ile Ile His Pro Ser Gly Gly Ser Thr Ser Gln Val

Gln Lys Phe Gln Gly Arg Leu Thr Met Thr Arg Asp Thr Pro Thr Ser 70 75 80

Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val 85 90

Tyr Tyr Cys Ala Arg Gly Ala Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr 100 105 110

Pro Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Thr Val Thr Val Ser 115 120 1928

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser 130 135 140

Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr 145 150 155 160

Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly  $180\,$ 

Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser 195  $200\,$  205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \,$   $\,$  250

<210> 1647

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1647

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Met Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Phe Asp Ser 20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly His Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Asn Ala Asn Asn Gly Gly Thr Lys Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Tyr Pro Ile Asp Val Leu Thr Gly Arg Arg Thr Lys Asn  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Trp Phe Asp Pro Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu 130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 \$150\$

% Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr 165 \$170\$ . \$175\$

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn  $180 \hspace{1.5cm} 185 \hspace{1.5cm} 190 \hspace{1.5cm}$ 

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 \$215\$

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe 225 230 235 240

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1648

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1648

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Asn Tyr

Ala Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Thr Val Ile Ser Asp Asp Gly Asn Asn Val Asn Tyr Glu Asp Ser Val 50

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Gln Ser Val Tyr 65 / 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Val Asp Arg Leu Leu Met Gln Tyr Asn Tyr Tyr Met 100 . 105 . 110

Asp Ala Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145  $\phantom{0}$   $\phantom{0}$  150  $\phantom{0}$  155  $\phantom{0}$  160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165  $^{\circ}$  170 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1649

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1649

Gln 1	Val	Gln	Leu	Gln 5	Gln	Ser	Gly	Ala	Glu 10	Val	Ĺys	Lys	Pro	Gly 15	Ser	
Ser	Val	Ĺys	Val 20	Ser	Cys	Lys	Ala	Ser 25	G1y	Gly	Thr	Phe	Ser 30	Ser	His	
Tyr	Ile	A1a 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met	
Gly	Arg 50	Val	Met	Pro	Ala	Leu 55	Gly	Thr	Ala	Asn	Tyr 60	Ala	Gln	Arg	Phe	
Gln 65	Gly	Arg	Val	Thr	Phe 70	Thr	Ala	Asp	Lys	Ser 75	Thr	Thr	Thr	Ala	Tyr 80	
Met	Glu	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys	
Ala	Arg	Ala	Thr 100	Tyr	Asp	Pro	Leu	Thr 105	Gly	Tyr	Ser	Phe	Asp 110	Gly	Phe	
Asp	I1e	Trp 115	Gly	Arg	Gly	Thr	Leu 120	Val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly	
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Gln	Ser	Val	Leu	
Thr 145	Gln	Pro	Ala	Ser	Val 150	Ser	Gly	Ser	Pro	Gly 155	Gln	Ser	Ile	Thr	Ile 160	
Ser	Cys	Thr	Gly	Thr 165	Ser	Ser	Asp	Va1	Gly 170	Gly	Tyr	Asn	Tyr	Val 175	Ser	
Trp	Tyr	Gln	Gln 180	His	Pro	Gly	Lys	Ala 185	Pro	Lys	Leu	Met	Ile 190	Tyr	Glu	
Gly	Ser	Lys 195	Arg	Pro	Ser		Val 200	Ser	Asn	Arg	Phe	Ser 205	Gly	Ser	Lys	
Ser	Gly 210	Asn	Thr	Ala		Leu 215	Thr	Ile	Ser	Gly	Leu 220	Gln	Ala	Glu	Asp	

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Gln Val

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1650 <211> 253

<212> PRT <213> Homo sapiens

<400> 1650

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Ser Asn Ala  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30 \hspace{1.5cm}$ 

Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala 50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Lys Asp Asp Ser Lys Asn Thr 65 70 75 80

Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr 85 90 95

Tyr Cys Thr Thr Asp Ala Tyr Tyr Asp Ile Leu Thr Gly Trp Val Tyr 100 105 110

Gly Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly  $115 \\ 120 \\ 125$ 

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser 130 135 140

Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145 150 155 160

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr \$165\$

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185 190

Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly 195 200 205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala 210 220

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1651

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1651

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Asn Tyr Ser Ile Ser Ser Gly

Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp

Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser 65 70 75 80

Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys  $85 \ 90 \ 95$ 

Ala Arg Phe Arg Tyr Asp Ile Leú Thr Gly Tyr Tyr Tyr Asp Met Asp 100 105 110

Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 135 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys  $145 \hspace{1cm} 150 \hspace{1cm} 155 \hspace{1cm} 160$ 

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys 165 170 175

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195 200 205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1652

<211> 247

<212> PRT <213> Homo sapiens

<400> 1652

Gln Met Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ala Met Ser Trp Val Arg His Thr Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val $50 \\ 60$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 135 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys  $145 \hspace{1.5cm} 150 \hspace{1.5cm} 155 \hspace{1.5cm} 160 \hspace{1.5cm}$ 

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys  $165 \hspace{0.25in} 170 \hspace{0.25in} 170 \hspace{0.25in} 175$ 

Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro  $180 \,$   $180 \,$   $185 \,$ 

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1653

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1653

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ile Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ala Ile Ser His Asn Ala Asp His Thr Tyr Ser Ala Asp Ser Val $_{50}$ 

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Ala Ala Thr Arg Met Asp Val Leu Thr Arg Tyr Tyr Ser Asp Phe Trp \$100\$

Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro 130 135 140

Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln \$165\$

Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys 180 185 190

Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1654

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1654

Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr  $20 \\ 25 \\ 30$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 55 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 75$ 

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly  $100 \\ 100 \\ 110$ 

Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 \$120\$

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145  $\phantom{00}$  150  $\phantom{00}$  150  $\phantom{00}$  155  $\phantom{00}$  160

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 \$170\$

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}225\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1655

<211> 246

<212> PRT

<213> Homo sapiens

<400> 1655

Gly 1	Val	Ģln	Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ser	
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	30	Tyr	Tyr	
Thr	Phe	Ser 35	Trp	Ile	Arg	Gln	Ala 40	Pro	Gly	His	Trp	Leu 45	Glu	Trp	Met	
Gly	Gly 50	Ile	Asn	Pro	Ile	Arg 55	Gly	Thr	Ala	Asn	Тут 60	Ala	Gln	Lys	Ser	
Arg 65	Gly	Gly	Val	Thr	Ile 70	Thr	Ala	qzA	Glu	Leu 75	Thr	Asn	Thr	Val	Tyr 80	
Met	Glu	Leu	Thr	Ser 85	Leu	Glu	Ser	qaA	qzA 00	Thr	Ala	Val	Tyr	Phe 95	Cys	
Ala	Ala	Glu	Gly 100	Ala	Ala	qzA	Tyr	Leu 105	Asn	Gly	Gln	Tyr	Phe 110	Gln	His	
Trp	Gly	Lys 115	Gly	Thr	Leu	Val	Thr 120	Val	Ser	Ser	Gly	Gly 125	Gly	Gly	Ser	
Gly	Gly 130		Gly	Ser	Gly	Gly 135	Gly	Gly	Ser	Ser	Glu 140	Leu	Thr	Gln	Asp	
Pro 145	Ala	Val	Ser	Val	Ala 150	Leu	Gly	Gln	Thr	Val 155	Arg	Ile	Thr	Cys	Gln 160	
Gly	Asp	Ser	Leu	Arg 165	Ser	Tyr	Tyr	Ala	Ser 170	Trp	Tyr	Gln	Gln	Lys 175	Pro	
Gly	Gln	Ala	Pro		Leu	Val	Ile	Tyr 185	Gly	Lys	Asn	Asn	Arg 190	Pro	Ser	
Gly	Ile	Pro 195		Arg	Phe	Ser	Gly 200		Ser	Ser	Gly	Asn 205	Thr	Ala	Ser	
Leu	Thr 210		Thr	Gly	Ala	Gln 215	Ala	Glu	Asp	Glu	Ala 220	Asp	Tyr	Tyr	Cys	
Asn 225		Arg	Asp	Ser	Ser 230		Asn	His	Val	Val 235		Gly	Gly	Glý	Thr 240	

Lys Leu Thr Val Leu Gly

<210> 1656

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1656

Lys Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}1$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Leu Ser Arg Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Val Phe Gly Thr Glu Asn Tyr Ser Gln Lys Phe 50 55 60

Gln Gly Arg Val Ser Ile Thr Ala Asp Glu Leu Thr Asn Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Gln Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Ala Asp Thr Arg Val Ile Gly Ile Gln Leu Trp Glu Arg Gly Ala  $100 \,$   $105 \,$   $110 \,$ 

Phe Asp Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 150 155

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val  $165 \\ 170 \\ 175$ 

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 \$200\$

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 225 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1657

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1657

Pro Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 0.05$ 

Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Val Leu Gly Gln Thr Val Arg Ile Thr 145 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Val Ser Trp Tyr Gln Gln 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg  $180 \hspace{0.5cm} 185 \hspace{0.5cm} 185 \hspace{0.5cm} 190 \hspace{0.5cm}$ 

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1658

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1658

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Gly Thr Phe Ser Thr His 20 25 30

Ala Ile Asn Trp Val Arg Gin Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Gly Ile Ile Pro Met Ser Ala Thr Thr Arg Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Leu Thr Ile Ile Ala Asp Glu Leu Thr Ser Thr Val His  $65 \ 70 \ 75 \ 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Pro Leu Gly Ile Thr Ala Val Arg Gly Ala Lys Thr Asp Ala  $100 \\ 105 \\ 110$ 

Phe Gly Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 135 Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155 Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 170 Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 205 Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220 Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 230 Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1659 <211> 254 <212> PRT <213> Homo sapiens <400> 1659 Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Leu Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr 20 25 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile 35 40 45 Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys 55 50

70 75 80

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Arg Gly Arg Arg Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Leu Gly Arg 100 105 110

Gly Glu Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser

Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 130 140

Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys  $145 \hspace{1cm} 150 \hspace{1cm} 155 \hspace{1cm} 160 \hspace{1cm}$ 

Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr 165 170 175

Val Ser Trp Tyr His Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185 190

Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly 195 200

Ser Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser 210  $\phantom{\bigg|}220$ 

Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser 225 230 235 240

Glu Phe Leu Phe Gly Ala Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ \,$  250

<210> 1660

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1660

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg-Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 05 \\ 105$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr  $^{\circ}$  130 \$140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Ala Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg \$180\$

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245 .

<210> 1661

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1661

Glu 1	Val	G1n	Leu	Val 5	Gln	Ser'	Gly	Ala	G1u 10	Va1	Lys	Lys	Pro	Gly 15	Ser
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Thr	Ser 25	G1y	Gly	Thr	Phe	Ser 30	Ser	Tyr
Ala	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	G1y	Leu 45	Glu	Trp	Met
Gly	G1y 50	Ile	Leu	Pro	Ile	Phe 55	G1y	Pro	Ala	Arg	Tyr 60	Ala	G1u	Lys	Phe
Gln 65	Gly	Arg	Val	Thr	Ile 70	Thr	Ala	Asp	G1u	Leu .75	Thr	Arg	Thr	Ala	Tyr 80
Met	Glu	Leu	Lys	Thr 85	Leu	Arg	Ser	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Ala	Gly 100	Thr	Ser	Leu	Met	Asn 105	Tyr	Gly	Thr	Asp	Val 110	Trp	Gly
Arg	Gly	Thr 115	Met	Val	Thr	Val	Ser 120	Ser	Gly	Gly	Gly	Gly 125	Ser	Gly	Gly
Gly	Gly 130	Ser	Gly	Gly	Gly	G1y 135	Ser	Gln	Ser	Val	Leu 140	Thr	Gln	Pro	Ala
Ser 145	Val	Ser	Gly	Ser	Pro 150	Gly	Gln	Ser	Ile	Thr 155	Ile	Ser	Cys	Thr	Gly 160
Thr	Ser	Ser	Asp	Val 165	Gly	Gly	Tyr	Asn	Tyr 170		Ser	Trp	Tyr	Gln 175	Gln
His	Pro	Gly	Lys 180	Ala	Pro	Lys	Leu	Met 185	Ile	Tyr	Glu	Gly	Ser 190	Lys	Arg
Pro	Ser	Gly 195	Val	Ser	Asn	Arg	Phe 200	Ser	Gly	Ser	Lys	Ser 205	Gly	Asn	Thr
Ala	Ser 210		Thr	I1e	Ser	Gly 215	Leu	Gln	Ala	Glu	Asp 220	Glu	Ala	Asp	Tyr
Tyr 225	Сув	Ser	Ser	Tyr	Thr 230	Thr	Arg	Ser	Thr	Arg 235	Va1	Phe	Gly	Gly	Gly 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1662

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1662

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Ala Lys Lys Pro Gly Ala 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly His Thr Phe Thr Ser Tyr \$20\$

Val Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 \$40\$

Gly Trp Ile Thr Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu  $50 \ \ 55 \ \ \ 60$ 

Gln Gly Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Asn Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Pro Tyr Asp Val Leu Thr Gly Tyr Leu Ser Gly Asn Phe  $100 \,$   $105 \,$   $\_$   $110 \,$ 

Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg  $180 \,$   $185 \,$   $190 \,$ 

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr  $195 \hspace{0.5cm} 200 \hspace{0.5cm} 205 \hspace{0.5cm}$ 

- 1947

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1663

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1663

Glm Val Glm Leu Glm Glm Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Arg Ala Ser Glu Arg Thr Val Arg Thr Ser  $20 \\ 25 \\ 30$ 

Asp Ile Ser Trp Ile Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Met Ile Ile Pro Ile Phe Gly Thr Thr Thr Tyr Ala Gln Gln Phe  $50 \hspace{1cm} 60$ 

Gln Gly Arg Val Ser Ile Asp Val Asp Ala Leu Thr Ser Thr Ser Val 65 70 75 80

Leu Glu Leu Gly Ser Leu Thr Pro Glu Asp Thr Ala Ile Tyr Tyr Cys 85 90 95

Ala Thr Gln Gly Gly Gln Tyr Asp Ser Pro Pro Phe Asp Val Trp Gly
100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Fro Ala 130 135 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 \$150\$

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 . 170 . 175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1664

<211> 259 <212> PRT

<213> Homo sapiens

<400> 1664

Gln Val Gln Leu Val Gln Ser Gly Gly Ala Leu Val Gln Pro Gly Arg 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Asp Tyr 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Gly Val Ser Trp Asn Ser Gly Ser Ile Ala Tyr Ala Glu Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Ser 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Glu Lys Ala Arg Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr  $100 \qquad 105 \qquad 110$ 

Ser Ala Trp Gly Gly Tyr Tyr Met Asp Val Trp Gly Arg Gly Thr Leu  $115 \\ 120 \\ 125$ 

- 1949

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 130 135 140

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly 145 \$150\$

Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp  $165 \\ 170 \\ 175$ 

Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys 180 185 190

Ala Pro Lys Leu Met Ile Tyr Glu Gly Gly Lys Arg Pro Ser Gly Val \$195\$ 200 205

Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr  $210 \\ \hspace{1.5cm} 215 \\ \hspace{1.5cm} 220 \\ \hspace{1.5cm}$ 

Ile Ser Gly Leu Gl<br/>n Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr 245  $\phantom{0}$  250  $\phantom{0}$  Thr Lys Leu Thr

Val Leu Gly

<210> 1665

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1665

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Thr Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Val Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Arg Ile Thr Pro Ile Leu Gly Thr Pro Asn Leu Ala Gln Lys Phe 50 60

Gln Gly Arg Leu Thr Ile Thr Ala Asp Glu Leu Thr Lys Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Leu Asn Leu Glu Lys Thr Val Ile Arg Gly Phe Gly Tyr Phe  $100 \\ 105 \\ 110$ 

Asp Leu Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser Ser Glu Leu Thr  $130 \\ \hspace{1.5cm} 135 \\ \hspace{1.5cm} 140 \\ \hspace{1.5cm}$ 

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr  $145 \\ 150 \\ 155 \\ 160$ 

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1666

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1666

Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr  $65 \phantom{000}70\phantom{000}75\phantom{000}75$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 130 140

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 150 160

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val  $165 \hspace{1cm} 170 \hspace{1cm} 175$ 

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 205

Arg Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1667 <211> 248

<212> PRT <213> Homo sapiens

<400> 1567 Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Leu Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \,$   $105 \,$   $110 \,$ 

Asp Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gin Asp Pro Ala Val Ser Val Ala Leu Gly Gin Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}225\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1668

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1668

Gly Val Gln Leu Val Gln Ser Gly Ser Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 105 \\ 110$ 

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 175 \$175\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1669

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1669

Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Arg Pro Gly Ser 1  $\phantom{-}$  5  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala His Gly Gly Thr Phe Ser Ser Ser 20 25 30

Met Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Phe Ile Pro Ile Phe Gly Thr Glu Arg Lys Ala Pro Lys Phe 50 60

Gln Gly Arg Val Thr Leu Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Thr Ser Pro Tyr Asp Thr Leu Thr Gly Tyr Val Tyr Asn Gly Val 100 105 110

Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys  $195 \hspace{0.5cm} 200 \hspace{0.5cm} 205 \hspace{0.5cm}$ 

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Arg Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1670

<211> 248

<212> PRT <213> Homo sapiens

<400> 1670

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $_{50}$   $_{60}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 150 155

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 175 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr  $195 \hspace{1.5cm} 200 \hspace{1.5cm} 205 \hspace{1.5cm} 205 \hspace{1.5cm}$ 

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 \$230\$

Gly Thr Lys Leu Ala Val Leu Gly 245

<210> 1671

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1671

Gln Val Thr Leu Lys Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Thr Asn Tyr Ala Glu Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Gln Gly Arg Leu Thr Ile Thr Ala Asp Glu Leu Thr Asn Thr Thr Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Val Ala Ala Ala Gly Ala Arg Thr Leu Gly Tyr Phe Gly Met 100 105 110

Asp Val Trp Gly Gly Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile 145 150 150 155

Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp 165 170 175

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val 180 185 190

Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu 225 230 235 240

Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1672

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1672

Gln Vai Gin Leu Val Gin Ser Gly Ala Glu Val Lys Lys Pro Gly Asp 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser His  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$ \$45\$

Gly Val Ile Asn Pro Thr Gly Ser Ala Thr Asn Tyr Ala Gln Lys Phe 50

Gln Asp Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Asp Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser 130 140

Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile 145  $\phantom{\bigg|}$  150  $\phantom{\bigg|}$  155  $\phantom{\bigg|}$  160

Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr \$165\$ \$170\$ \$175\$

Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile 180 185 190

Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly
195 200 205

Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala 210 \$215\$

Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr 225 230 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ 250 \ \ \$ 

<210> 1673 <211> 254

<212> PRT <213> Homo sapiens

<400> 1673

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Met Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr  $20 \\ 25 \\ 30$ 

Gly Met Ala Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Val Ile Glu Asn Ser Gly Gly Thr Thr Tyr Tyr Ala Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Ser Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$

Ala Asn Ser Pro Met Tyr Tyr Asp Arg Leu Thr Gly Phe Tyr Pro Ser 100  $^{\circ}$  110  $^{\circ}$ 

Gly Tyr Phe Asp Ser Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser 115 \$120\$

Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln  $130\,$ 

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145 150 155 160

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn  $165 \\ 170 \\ 175$ 

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met  $180 \hspace{1.5cm} 185 \hspace{1.5cm} 190 \hspace{1.5cm}$ 

The Tyr Ghu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 235 240

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1674

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1674

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gln Gly Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Ala Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro Tyr Gly  $100 \ \ 105 \ \ 110$ 

Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val 130 135 140

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155 160

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 165 170 175

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser . 195 200 205

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1675

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1675

Ser Val Arg Val Ser Cys Gln Ala Ser Gly Tyr Thr Phe Thr Asn Phe 20 25 30

Ala Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Leu 35 40 45

Gly Arg Ile Ile Pro Ile Leu Gly Thr Ser Asn Phe Ala Gln Lys Phe 50 55 60

Gln Asp Arg Leu Thr Met Ser Ala Asp Glu Leu Thr Ser Thr Val Tyr 65 70 75 80

Met Glu Leu Asp Ser Leu Thr Ser Glu Asp Thr Ala Ile Tyr Tyr Cys

Ala Arg Gly Pro Ser Ser Ala Gly Thr Thr Ile Gly Leu Gly Ser Phe  $100 \,\,$   $105 \,\,$   $110 \,\,$ 

Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 150 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Gly Trp Tyr Gln Gln 175 \$175\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly

<210> 1676

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1676

Ala Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Gln Pro Gly Ser 1 5 10

Ser Val Asn Val Ser Cys Lys Val Ser Gly Gly Thr Phe Gly Ser Ser 20 25 30

Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Ile Ala Asp Glu Leu Thr Asn Thr Val Asn 65 70 75 80

Met Glu Leu Ser Gly Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Glu Thr Arg Lys Tyr Thr Ser Ser Pro Pro Tyr Asn Tyr Tyr  $100 \,$   $105 \,$   $110 \,$ 

Tyr Met Asp Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly 125

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu 140 135

Leu Ala Gln Asp Pro Ala Val Ser Val Ala Ser Gly Gln Thr Val Arg 145

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr 165

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn 185 180

Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 200

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 215

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe 235 225 230

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1677

<211> 243

<212> PRT <213> Homo sapiens

<400> 1677

Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ser 1 5

Ser Val Arg Val Ser Cys Arg Phe Thr Glu Ser Pro Ile His Trp Val 20

Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Leu Gly Gly Phe Asp Arg 40 35

Glu Glu Gly Lys Thr Leu Tyr Ala Gln Lys Phe Gln Gly Arg Val Ile 55

Leu Thr Glu Asp Phe Leu Thr Lys Thr Ala Tyr Leu Glu Met Arg Thr 65 70 75 80

Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Val Phe Asp Gln Phe 85 90 95

Ser Val Gly Gly Arg His Ala Phe Asp Leu Trp Gly Arg Gly Thr Leu  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$ 

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 115 120 125

Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly 130 135

Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys  $165 \\ 170 \\ 175$ 

Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val

Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr

Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr 225 230 235 240

Val Leu Gly

<210> 1678

<211> 242

<211> 242 <212> PRT

<213> Homo sapiens

<400> 1678

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Iie Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Lys Gly  $100 \\ 100 \\ 105$ 

Thr Met Va1 Thr Va1 Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser 130 135

Val A1a Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu 145 150 150 160

Arg Ser Tyr Tyr Ala Ser Trp Tyr G1n G1n Lys Pro Gly G1n Ala Pro 165 170 175

Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp 180 185 190

Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr 195 200 205

Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp 210 215 220

Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val 225 230 235 240

Leu Gly

<210> 1679 <211> 248

<212> PRT <213> Homo sapiens

<400> 1679

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Glu Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg.Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr  $_{65}$   $_{70}$   $_{70}$ 

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 0105 \\ 110$ 

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 170 175

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg  $180 \,$   $185 \,$   $190 \,$ 

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Gly Asn Thr 195 200 205 .

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}$ 

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1680

<211> 247

<212> PRT <213> Homo sapiens

<400> 1680

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45 \ \ \,$ 

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly  $100 \\ 100 \\ 105 \\ 110$ 

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Thr Ala  $130\,$ 

Cys Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Val Ser Cys Thr Gly 145 150 155 160

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Ser His Gln 165 170 175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Ile Thr

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Ala Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1681

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1681

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50 \hspace{1cm} 60$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe
100 105 110

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 185

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 200

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 215

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 230 235

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1682

<211> 247

<212> PRT <213> Homo sapiens

<400> 1682

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 55

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly 100 105 110

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 130 135

Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly 145 150 155 160

Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His 165 170 175

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala 195 200 205

Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1683

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1683

Gly Val Gln Leu Val Gln Ser Gly Ala Val Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Arg Asn Asn 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

Gly Gly Ile Ile Pro Val Phe Glu Thr Ile Asn Thr Ala Gln Lys Phe 50  $\phantom{0000}$  .  $\phantom{00000}$  55  $\phantom{000000}$  60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Thr Thr Ala Tyr 70

Met Glu Leu Ser Ser Leu Arg Val Asp Asp Thr Ala Val Tyr Tyr Cys 90

Ala Thr Glu Arg Gly Val Val Thr Ala Tyr Gly Gly Asp Ser Phe Asp 1.05

Leu Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr 130 135 140

Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser 150 155 160

Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp 165

Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly 1.80

Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser 195

Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu 210 215

Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe 225 230

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1684

<211> 253

<212> PRT

<213> Homo sapiens

<400> 1684 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10

Ser Val Lys Val Ser Cys Gln Ala Ser Gly Gly Thr Phe Ser Thr His 25 30 1972

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Gly Ile Ile Pro Met Ser Ala Thr Thr Arg Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Leu Thr Ile Ile Ala Asp Glu Leu Thr Ser Thr Val His

-Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Pro Leu Gly Ile Thr Ala Val Arg Gly Ala Lys Thr Asp Ala  $100 \,$   $105 \,$  ,  $\,$   $110 \,$ 

Phe Gly Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 \$120\$

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 130 135 140

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145  $$150\$ 

Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val  $165 \\ 170 \\ 175$ 

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 185 190

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 205

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu Asn Gly 225 230 235 240

Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly \$245\$

<210> 1685 <211> 247

<212> PRT <213> Homo sapiens

<400> 1685 Gin Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35  $\phantom{-}40\phantom{0}$  45

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe  $50 \hspace{1cm} 60$ 

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly
100 105 110

Gln Gly Thr Pro Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 130 135 140

Ser Ala Ser Gly Ser Pro Gly Gln Ser Val Thr Ile Ser Cys Thr Gly 145 150 150 155

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 \$170\$

His Pro Gly Lys Ala Pro Lys Phe Met Ile Tyr Asp Val Ser Lys Arg 180 185

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Val Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Ser Ala Ser Thr Val Ile Phe Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1686

<211> 244 <212> PRT

<212> PR1

<213> Homo sapiens

<400> 1686
Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
1
5
10
15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Ser Ser Arg Phe 20 25 30

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gln Gly Arg Leu Val Ile Asn Val Asp Glu Leu Thr Asn Thr Thr Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Thr Ser Leu Thr Ser Glu Asp Thr Ala Ile Tyr Tyr Cys \$85\$ 90 95

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly 115 120 125

Gly Gly Ger Ala Gen Ser Ala Leu Thr Gln Pro Ala Ser Val Ser 130 . 135 140

Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser 145 \$150\$

Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly
165 170 175

Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu 195 200 205

Thr Ile Ser Gly Leu Gln Ala Gly Asp Glu Ala Asp Tyr Tyr Cys Ser 210 225

Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu 225 230 235 240

Thr Val Leu Gly

<210> 1687

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1687

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Gly Ile Leu Pro Ile Phe Gly Ser Ala Lys Tyr Ala Glu Lys Phe .  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ser Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly 100 105 110

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala  $130\,$ 

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 150 155 160

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 170 175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1688

<211> 251

<212> PRT <213> Homo sapiens

<400> 1688

Gln Val Gln Leu Val Gln Ser Gly Ala Lys Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 . 55 60

Gln Gly Arg Ala Thr Ile Thr Ala Asp Lys Ala Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Val Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Glu Pro Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Ser Tyr Phe  $100 \,$   $105 \,$   $110 \,$ 

Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Asp Gly Tyr Asn Tyr Val Ser 165 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 185 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 Ser Gly Asp Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 215 210 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1589 <211> 247 <213> Homo sapiens <400> 1689 Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

1978

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly 100 105 110

Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 \$120\$

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}155\phantom{\bigg|}$ 

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165  $$170\$ 

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg  $180 \,$   $185 \,$   $190 \,$ 

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 . 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1690

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1690

Gln Val Gln Leu Gln Gln Trp Gly Gly Gly Val Val Gln Pro Gly Arg 1 5 10 15 .

Ser Gln Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Ser Thr Tyr

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ala Val Ile Ser Tyr Asp Gly Ser Lys Lys Tyr Tyr Gly Asp Ser Val 55

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr 70

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Met Tyr Tyr Cys

Ala Asn Thr Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Gly Gly Ala 100 105

Phe Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 130 135 140

Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 145 150 155

Ile Ser Cys Thr Gly Thr Ser Gly Asp Val Gly Gly Tyr Asn Tyr Val

Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr

Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 195 200 205

Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 2.45 250

<211> 246

<sup>&</sup>lt;210> 1691

<212> PRT <213> Homo sapiens

<400> 1691

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Ala Leu Ser Asn Tyr
20 25 30

Gly Val Ala Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Trp Ile Ser Gly Tyr Asp Gly Thr Thr Lys Tyr Ala Gln Asn Phe  $50 \ \ 55 \ \ 60$ 

Gln Asp Arg Val Thr Met Thr Thr Asp Thr Leu Thr Lys Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Thr Arg Gly Ser Arg Val Arg Gly Val Thr Pro Asp Leu Trp Gly Arg 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser 130 135 140

Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr 145 150 155 160

Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His 165 170 175

Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala 195 200 205

Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr 225 230 235 240

Lys Leu Thr Val Leu Gly 245

<210> 1692

<211> 244 <212> PRT

<213> Homo sapiens

<400> 1692

Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}1$ 

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala 130 140

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp 145 150 155 160

Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln 165 170 175

Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile 180 185 190

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr

Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser 210 215 220

Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu 225 230 235 240

Thr Val Leu Gly

<210> 1693

<211> 256

<212> PRT <213> Homo sapiens

<400> 1693

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Met Lys Lys Ser Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser His Ser 20 25 30

Val Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Thr Pro Met Phe Asp Thr Val Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Ile Ala Asp Lys Leu Thr Asn Thr Val His 65 70 75 80

Met Glu Val Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys 85 90 95

Ala Ser Glu Cys Ser Gly Ser Ser Cys Pro Ala Arg Gln Pro Pro Tyr 100 105 110

Tyr Gln Tyr Tyr Met Asp Val Trp Gly Arg Gly Thr Thr Val Thr Val 115 120 125

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 130 135 140

Ser Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly 145 150 155 160

Gln Lys Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn 165 170 175

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu

Met Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe 195 200 205

Ser Gly Ser Lys Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu 210 215 220

Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser 225 230 235 235 240

<210> 1694

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1694

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 195 \hspace{1cm} 95$ 

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala 130 135 140

Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp 145 150 155 160

Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln 175 \$175\$

Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile  $180 \,\,$   $185 \,\,$   $190 \,\,$ 

Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr 195 200 205

Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Thr Val Leu Gly

<210> 1695

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1695

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Met Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Gly Asn Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30$ 

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Phe Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Ile Ile His Pro Ser Gly Gly Ser Thr Ser Gln Val Gln Lys Phe 50 60

Gln Gly Arg Leu Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr . 75 70 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 9.0 Ala Arg Gly Ala Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro Tyr Gly 105 Met Asp Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val 135 130 Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr 150 145 Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val 170 165 Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr 180 Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser 200 195 Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu 210 . 215 Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg 225 230 Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1696 <211> 247 <212> PRT <213> Homo sapiens <400> 1696

Ser Val Lys Val Ser Cys Arg Ala Ser Glu Arg Thr Val Arg Thr Ser

Gly Ile Ser Trp Ile Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met

Gly Met Ile Ile Pro Ile Phe Gly Thr Thr Thr Tyr Ala Gln Gln Phe 50 60

Gln Gly Arg Val Ser Ile Asp Val Asp Ala Leu Thr Ser Thr Ser Val 65 70 75 80

Leu Glu Leu Gly Ser Leu Thr Pro Glu Asp Thr Ala Ile Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 \$150\$

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 175 175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Lys Leu Thr Val Leu Gly 245

<210> 1697 <211> 247

<212> PRT <213> Homo sapiens

<400> 1697
Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Val Lys Lys Pro Gly Ser
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Arg Tyr Ala Glu Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$ 

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly  $100 \,$   $105 \,$   $110 \,$ 

Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 \$120\$ , \$125\$

Gly Gly Ser Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala 130 135 140

Ser Val Ser Gly Ser Arg Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145  $\phantom{000}$  150  $\phantom{000}$  155  $\phantom{000}$  160

Thr Thr Gly Asp Val Gly Gly Tyr Asp Tyr Val Ser Trp Tyr Gln Gln 165  $$170\$ 

His Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Gly Asn Ser Asn Arg \$180\$

Pro Ser Gly Val Pro Asp Arg Phe Ser Ala Ser Lys Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Phe Cys Ser Thr Tyr Ala Pro Pro Gly Ile Ile Met Phe Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1698

<211> 252 <212> PRT

<213> Homo sapiens

<400> 1698

Gln Val Thr Leu Lys Glu Ser Gly Ala Gln Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Ala Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 35 40 . 45

Gln Gly Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Ser Thr Ala Tyr  $65 \phantom{0000}75\phantom{0000}$  70  $\phantom{00000}75\phantom{0000}$  80

Met Glu Leu Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Ala Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Pro Tyr Gly 100 105 110

Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val

Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr 145 150 155 160

Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser 165 170 175

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp 180 185 190

Val Ser Lys Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys 200 Ser Gly Asn Ser Ala Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp 215 Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Gly <210> 1699 <211> 254 <212> PRT <213> Homo sapiens <400> 1699 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 5 10 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 25 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 4.0 Gly Arg Ile Ile Pro Ile Leu Gly Ile Ala Asn Tyr Ala Gln Lys Phe 50 Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 . 95 Ala Arg Asp Tyr Arg Asn Tyr Asp Ile Leu Thr Gly His Pro Tyr Tyr 100

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gl<br/>n 135 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145 150 155 160

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Pro Asn Arg Phe Ser

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$ 

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1700

<211> 248

<212> PRT <213> Homo sapiens

<400> 1700

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Ser Tyr 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Lys Ile Asn Pro Ser Gly Thr Ser Val Thr Tyr Ala Gln Arg Phe  $50 \,\,\,$ 

Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Thr Ser Thr Asn Tyr 65 70 75 80

Met Glu Val Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Gly Gln His Tyr Asp Ile Leu Thr Gly Tyr Ser Gln Glu Pro Phe  $100 \,$   $105 \,$   $110 \,$ 

1991 ---

Asp Ile Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Gln Met 130 135 140

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Ile Gly Asp Arg Val Thr 145 150 150 155 160

Ile Thr Cys Arg Ala Ser Glu Gly Ile Tyr His Trp Leu Ala Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser  $180 \,$   $185 \,$   $190 \,$ 

Ser Leu Ala Ser Gly Ala Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala 210 215 220

Thr Tyr Tyr Cys Gln Gln Tyr Ser Asn Tyr Pro Leu Thr Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1701

<211> 254

<212> PRT

<213> Homo sapiens

<400> 1701

Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Lys Asp Gln Thr Tyr Tyr Asp Ile Leu Thr Gly His Tyr Tyr Tyr 100 105 110

Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser 115 \$120\$

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln 130 135 140

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145  $\phantom{-}150\phantom{0}$ 

Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 185 190

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 230 235

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1702

<211> 246

<212> PRT

<213> Homo sapiens

<400> 1702

Gln Val Gln Leu Gln Gln Trp Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Lys Tyr Tyr

Thr Tyr Ser Trp Ile Arg Gln Ala Pro Gly Gln Trp Leu Glu Trp Met 35 40 45

Gly Ser Ile Asn Pro Val Arg Gly Thr Ala Asn Tyr Ala Gln His Leu  $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$ 

Arg Gly Arg Val Thr Ile Ile Ala Asp Glu Leu Thr Ser Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Gly Leu Gly Ser Asp Asp Thr Ala Val Tyr Phe Cys 85 90 95

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser  $115 \\ 120 \\ 125$ 

Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp 130 135 140

Pro Ala Met Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Gln 145 150 155 160

Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys Pro\$165\$ \$170\$ \$175\$

Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Arg Asn Asn Arg Pro Ser  $180 \,$   $185 \,$   $190 \,$ 

Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Gly Asn Thr Ala Ser

Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys  $210 \hspace{1cm} 215 \hspace{1cm} 220 \hspace{1cm}$ 

Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr 225 230 235 240

Lys Leu Thr Val Leu Gly 245

<210> 1703 <211> 247

<212> PRT <213> Homo sapiens

<400> 1703

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr 65  $\phantom{0}70$   $\phantom{0}75$   $\phantom{0}80$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Thr Leu Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Arg Ser Asp Asp  $100 \\ 105 \\ 110$ 

Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys  $145 \hspace{1.5cm} 150 \hspace{1.5cm} 155 \hspace{1.5cm} 160$ 

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys 165 170 175

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195 200 205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr  $210 \\ \hspace{1.5cm} 215 \\ \hspace{1.5cm} 220 \\ \hspace{1.5cm}$ 

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1704

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1704

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Gly Ser Ser Leu Met Ala Tyr Gly Thr Asp Val Trp Gly 100 105 110

Arg Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 150 155 160

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln Gln 175 \$175

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser His Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1705

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1705

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Leu Thr Ala Asp Lys Ser Thr Gly Thr Ala Tyr 65 70 . 75 80

Met Glu Leu Thr Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Glu Asn Tyr Asp Phe Leu Thr Gly Tyr Tyr Gly Ala Phe Asp  $100^\circ$  105 110

Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys 145 150 155 160

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys 165 170 175

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro 180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asp Thr Ala 195 200 205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Asn Ser Arg Asp Ser Ser Ser Thr His Arg Gly Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1706

<211> 251

<212> PRT <213> Homo sapiens

<400> 1706

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Asn  $20 \\ 25 \\ 30$ 

Val Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Gly Ser Gly Gly Gly Gly Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$ .160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser  $165 \\ 0.001770 \\ 0.00170 \\ 0.001770 \\ 0.001770 \\ 0.001770 \\ 0.001770 \\ 0.001770 \\ 0.00170 \\ 0.00$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \hspace{1cm} 185 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Gly Ser Glu Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys  $195 \hspace{1cm} 200 \hspace{1cm} 205 \hspace{1cm}$ 

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val  $225 \\ 230 \\ 235 \\ 240$ 

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1707 <211> 247

<211> 247

<213> Homo sapiens

<400> 1707

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr  $20 \\ 25 \\ 30$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 55 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly
100 105 110

Lys Gly Thr Leu Val Thr Val Ser Pro Gly Gly Gly Gly Ser Gly Gly 115 \$120\$

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Pro 130 135 140

Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser Cys Ser Gly 145  $\phantom{000}$  150  $\phantom{000}$  150  $\phantom{000}$  150  $\phantom{000}$  150  $\phantom{000}$ 

Ser Thr Ser Asn Ile Gly Asn Asn Tyr Val Ser Trp Tyr Gln Gln His  $165 \hspace{1cm} 170 \hspace{1cm} 175 \hspace{1cm}$ 

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Lys Arg Pro  $180 \,$   $185 \,$   $190 \,$ 

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Asn Ser Ala 195 200 205

Ser Leu Asp Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Ala Ala Trp Asp Asp Ser Leu Ser Glu Phe Leu Phe Gly Thr Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly

<210> 1708

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1708 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Arg

Ser Gln Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 50 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Arg Gly Gly Leu Tyr Asp Ile Leu Thr Gly Arg Pro Ala Thr Asp  $100 \,$   $105 \,$   $110 \,$ 

Asp Ala Phe Asp Ile Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser  $115 \ \ 120 \ \ 125$ 

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser 130 135 140

Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val 145 150 155 160

Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp 165 170 175

Phe Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys \$180\$

Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu 225 230 235

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1709

<211> 254

<212> PRT <213> Homo sapiens

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Arg Phe Asn Arg Tyr

Ala Thr Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Ile Ile Pro Leu Phe Gly Thr Thr Lys Tyr Ala Gln Arg Leu  $50 \,\,$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Asn Thr Val Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Thr Thr Asp Arg Phe Gly Ala Lys Asp Val Thr Ala Arg Trp Gly 100 105 110

Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gin Ala 130 135 140

Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro Gly Gln Arg Val 145 150 150 160

Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Ile Gly Ala Pro Tyr Asp \$165\$

Val His Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Leu Leu Met 180 185 190

Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly \$195\$

Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Ala 210 \$215\$

Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser 225 230 235 240

Gly Ser Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly 245

<210> 1710

<211> 257 <212> PRT

<213> Homo sapiens

<400> 1710

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Ala Leu Ser Ser Asp 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Gly Ile Ile Pro Thr Phe Arg Lys Thr Lys Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Phe 65 70 75 80

Ala Arg Gly Arg Glu Asp Thr Asp Lys Val Lys Pro Trp Asp Arg Tyr 100 105 110

Tyr His Tyr Tyr Tyr Met Asp Val Trp Gly Arg Gly Thr Met Val Thr 115 \$120\$

Gly Ser Ala Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser 145 150 155 160

Pro Gly Gln Ser Leu Thr Ile Ser Cys Thr Gly Thr Ser Arg Asp Val

Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala 180 185 190

Pro Lys Leu Ile Ile Tyr Asp Val Ser Lys Arg Pro Ser Gly Val Ser 195 200 205

Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile 210 215 220

Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr 225 230 235 240

Arg Ser Ser Ser Thr Met Phe Gly Gly Gly Thr Lys Val Thr Val Leu 245 250 255

Glv

<210> 1711

<211> 247

<212> PRT <213> Homo sapiens

<400> 1711

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Val Ser Ser Arg 20 25 30

Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Gly Ser Leu Pro Pro Ser Gly Ala Pro Ile Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60 \hspace{1cm}$ 

Gln Gly Arg Val Ala Ile Thr Ala Asp Ala Leu Thr Asn Thr Ala Phe 65 70 75 80

Met Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gln Gly Arg Tyr Leu Asp Leu Trp Gly Gln Gly Thr Leu 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly 115 120 125

Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 150 155 160

Ser Asn Ile Gly Ser Asn Phe Val Asn Trp Tyr Gln Gln Val Pro Gly 165 170 175

Thr Ala Pro Lys Leu Leu Ile Tyr Arg Asp Ile Gln Arg Pro Ser Asp

Thr Gly Val Pro Asp Arg Phe Ser Gly Ala Lys Ser Ala Thr Ser Ala 195 200 205

Ser Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Gly Ala Asp Tyr Tyr 210 215 220

Cys Ala Ala Trp Asp Asp Ser Leu Ser Gly Pro Val Phe Gly Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1712

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1712

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Arg Ala Ser Gly Gly Ser Phe Asn His Ala 20 25 30

Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Lou Glu Trp Met Gly 35 40 45

Gly Ile Leu Pro Met Tyr Gly Thr Ala Asn Tyr Ala Gln Lys Phe Gln  $_{\rm 50}$   $_{\rm 60}$ 

Gly Arg Val Thr Ile Thr Ala Asp Lys Leu Thr Asn Thr Val Tyr Met 65 70 75 80

Asp Leu Ser Arg Leu Arg Tyr Glu Asp Thr Ala Val Tyr Tyr Cys Ala 90 95

Arg Glu Leu Gly Leu Ser Ile Val Gly Ala Thr Thr Gly Ala Leu Asp

Met Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile 145 \$150\$

Trp Tyr Gln Gln Leu Pro Gly Thr Val Pro Lys Leu Val Ile Tyr Gly 180 185 190

Asn Asn Asn Arg Pro Ser Gly Val Ser Asp Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Arg Leu Gln Ala Glu Asp 210 215 220

Glu Ala Tyr Tyr Tyr Cys Gln Ser Tyr Asp Thr Gly Leu Ser Gly Leu 225 230 235 240

Phe Gly Gly Gly Thr Gln Leu Thr Val Leu Ser 245 250

<210> 1713

<211> 252

<212> PRT

<213> Homo sapiens

1 5

<400> 1713 'Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ser

Ser Val Arg Val Ser Cys Glu Ala Ser Gly Gly Lys Phe Ser Asn Tyr

Ser Leu Asn Trp Leu Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met  $35 \ \ \, 40 \ \ \, 45$ 

Met Glu Leu As<br/>n Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys \$85\$90

Ala Arg Glu Leu Gly His Arg Glu Gly Gly Tyr Trp Tyr Ser Pro Tyr 100 105 110

Asn Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val 130 135 140

Leu Thr Gln Pro Pro Ser Val Ser Gly Thr Pro Gly Gln Gly Val Ser 145 150 155 160

Ile Ser Cys Ser Gly Ser Ser Ser Asn Val Gly Ser Asn Thr Val Asn 165 170 175

Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile His Thr 180 185 190

Asn Asp Gln Met Pro Ser Trp Val Pro Asp Arg Phe Ser Gly Ser Lys 195 200 205

Ser Gly Thr Ser Ala Ser Leu Ala Ile Arg Gly Leu Arg Ser Glu Asp  $210 \\ 215 \\ 220$ 

Glu Ala Glu Tyr Phe Cys Ala Thr Trp Asp Asp Ser Leu Asn Ala Val 225  $\phantom{\bigg|}$  230  $\phantom{\bigg|}$  235  $\phantom{\bigg|}$  240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \ \,$ 

<210> 1714

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1714 Gln Val Gln Leu Val Gln Ser Gly Pro Glu Val Lys Lys Pro Gly Ser 10 15 2007

Ser Val Lys Val Ser Cys Lys Ala Ser Arg Gly Pro Phe Glu Asn Tyr  $20 \\ 25 \\ 30$ 

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Gly Arg Ile Val Pro Ile Ser Gly Ala Thr Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Asp Arg Leu Thr Leu Thr Ala Asp Glu Leu Thr Thr Thr Val Phe  $_{65}$   $\phantom{0}$  70  $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Thr Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Lys Asn Met Gly Ala Ser Ala Ala Ala Asp Phe Trp Gly Arg Gly  $100 \\ 105 \\ 110$ 

Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 115 \$120\$

Ser Gly Gly Gly Ser Ala Leu Ser Tyr Glu Leu Thr Gln Pro Pro 130 135

Ser Val Ser Val Ser Pro Gly Gln Thr Ala Arg Ile Thr Cys Ser Gly 145  $\phantom{\bigg|}150\phantom{\bigg|}150\phantom{\bigg|}155\phantom{\bigg|}$ 

Asp Val Leu Ala Asn Gln Tyr Ala Tyr Trp Tyr Gln Gln Lys Pro Gly 165 170 175

Gln Ala Pro Val Val Val Met Tyr Gln Asp Asn Glu Arg Pro Ser Gly  $180 \,$   $185 \,$   $190 \,$ 

Thr Pro Glu Arg Leu Ser Gly Ser Arg Ser Gly Ser Thr Val Thr Leu 195  $\phantom{\bigg|}200\phantom{\bigg|}205\phantom{\bigg|}$ 

Thr Ile Ser Gly Val Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln 210 215 220

Ser Ala Asp Ser Thr Gly Thr Tyr Ala Leu Phe Gly Gly Gly Thr Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 235 \hspace{1.5cm} 240 \hspace{1.5cm}$ 

Leu Thr Val Leu Gly 245

<210> 1715 <211> 250 <212> PRT <213> Homo sapiens

<400> 1715. Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Phe Asn Trp Val Arg Arg Ala Pro Gly Gln Gly Leu Glu Trp Leu 35 40 45

Gly Ser Ile Val Pro Val Phe Asn Thr Lys Thr Phe Ala Arg Lys Phe 50 60

Gln Gly Arg Val Thr Leu Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Leu Glu Leu Ser Asn Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5in} 90 \hspace{0.5in} 95$ 

Ala Ser Arg Tyr Gly Asp Pro Phe Tyr Tyr Tyr Tyr Tyr Met As<br/>n Val  $100 \ \ \, 105 \ \ \, 110$ 

Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr 130 140

Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln Lys Val Thr Ile Ser 145 150 155 160

Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr Glu Asn Asn  $180 \,$ 

Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly 195  $\phantom{\bigg|}200$  .  $\phantom{\bigg|}205\phantom{\bigg|}$ 

Thr Ser Ala Thr Leu Gly Ile Thr Gly Leu Gln Thr Gly Asp Glu Ala

Asp Tyr Tyr Cys Gly Thr Trp Asp Ser Ser Leu Ser Ala Val Ile Phe 225 230 235 240

<210> 1716

<211> 258 <212> PRT

<213> Homo sapiens

<400> 1716

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Met Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Thr Asn 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly His Gly Leu Glu Trp Met  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45 \hspace{1.5cm}$ 

Gly Arg Val Ile Pro Ile Phe Gly Lys Ser Lys Thr Ala Gln Arg Phe

Gln Gly Arg Leu Thr Ile Thr Ala Asp Lys Ala Thr Asp Thr Val Tyr 65 70 75 80

Met Glu Leu Ser Thr Leu Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Glu Ser Gly Ser His Tyr Asp Leu Leu Thr Gly Leu Leu Val

Ala Ala Asn Gly Phe Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val

Ser Ala Gln Ala Val Leu Thr Gln Pro Ser Ser Val Ser Gly Ala Pro 145 150 . 155 160

Gly Gln Arg Val Thr Ile Ser Cys Thr Gly Ser Ser Ser Asn Thr Gly  $165 \ 170 \ 175$ 

Ala Gly Tyr Asp Val His Trp Tyr Gln His Leu Pro Gly Thr Ala Pro  $180 \ \ 185 \ \ 190$ 

Lys Leu Val Ile Tyr Asp Ser Gly Asn Arg Pro Ser Gly Val Pro Asp 195 200 205

Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr 210 215 220

Gly Leu Gln Ala Glu Asp Glu Ala Asn Tyr Tyr Cys Gln Ser Tyr Asp 225 230 235 240

Thr Ser Leu Ser Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val 245 250 250

Leu Gly

<210> 1717

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1717

Gly Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Val Met

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser 180 185 190

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1718

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1718

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $$85\ \ 90\ \ 95$ 

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165  $$170\$ 

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly . 245

<210> 1719

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1719

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr  $\phantom{-}20\phantom{+}25\phantom{+}$ 

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Asp Ile Val Met  $130\,$ 

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145 150 150 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr \$165\$ \$170\$

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser  $180 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Thr Leu'Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys Arg

<210> 1720

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1720 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1.0 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Phe 25 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Leu 50 55 60 Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Arg Pro Tyr Tyr Asp Ile Leu Thr Gly Tyr Phe Ala Phe Asp Ile 100 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 120 125 115 Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln 130 135 Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys 145 150 155 Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr 165 170 175 Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser 185 190 1.80 Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly 195 200 Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala 215 220

Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly 225 230 235

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1721

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1721

Glu Val Gln Leu Val Glu Ser Gly Pro Glu Val Lys Lys Pro Gly Thr 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $\cdot$  35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Gly Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 185 190

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1722

<211> 250 <212> PRT

<213> Homo sapiens

<400> 1722

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Val Leu Pro His Tyr Asp Ile Leu Thr Gly Tyr Ser Gln Asn  $100 \ \ \ 105 \ \ \ \ 110$ 

Trp Phe Asp Pro Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly \$115\$ \$120\$ . \$125\$

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu 130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 150 155 160

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr 170 Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn 180 Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 200 Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 215 Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe 235 Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1723 <211> 250 <212> PRT <213> Homo sapiens <400> 1723 Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Glu Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr 20 Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 70

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 . 95

Trp Phe Asp Pro Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu 130 135 140

Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg 145 150 155 160

Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn 180 185 190

Asn Arg Ser Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly 195 200 205

Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala 210 215 220

Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe 225 230 235

Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1724

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1724

Gln Val Asn Leu Arg Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg 1  $\phantom{-}$  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr \$20\$

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  $_{\rm 35}$   $_{\rm 40}$  .  $_{\rm 45}$ 

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val 50  $\cdot$  60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

. 2019

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Tyr Tyr Gly 100 105 Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly 120 Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu 135 130 140 Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 150 155 Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln 165 Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn 180 185 Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 200 205 195 Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220 . Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235 240 Gly Gly Thr Lys Leu Thr Val Leu Gly 245 <210> 1725 <211> 249 <212> PRT

<213> Homo sapiens

<400> 1725 Gln Val Asn Leu Arg Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr 20 -

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  ${}^{\phantom{0}}_{\phantom{0}}$  65  ${}^{\phantom{0}}_{\phantom{0}}$  70  ${}^{\phantom{0}}_{\phantom{0}}$  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Lys Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Tyr Tyr Gly  $100 \ \ 105 \ \ \ 110$ 

Met Asp Val Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu 130 140

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145 150 155 160

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln  $165 \ \ 170 \ \ 175$ 

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp  $210 \cdot 210 \cdot 215$ 

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<sup>&</sup>lt;210> 1726

<sup>&</sup>lt;211> 247 <212> PRT

<sup>&</sup>lt;213> Homo sapiens

	)> 17 Val		Leu	Val	Gl'n	Ser	Gly	 Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyr	Thr	Phe	Thr 30	Thr	Tyr
Gly	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Trp 50	Ile	Ser	Ala	Tyr	Thr 55	Gly	Lys	Thr	Asn	Tyr 60	Ala	Gln	Lys	Leu
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Thr	Asp	Thr	Ser 75	Thr	Ser	Thr	Ala	Tyr 80
Met	Glu	Leu	Arg	Ser 85	Leu	Arg	Ser	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Val	Tyr 100	Tyr	Asp	Ile	Leu	Thr 105	Gly	Tyr	Asn	Ьeu	Phe 110	Phe	Asp
Tyr	Trp	Gly 115	Arg	Gly	Thr	Leu	Val 120	Thr	Val	Ser	Ser	Gly 125	Gly	Gly	Gly
Ser	Gly 130	Gly	Gly	Gly	Ser	Gly 135	Gly	Gly	Gly	Ser	Ser 140	Glu	Leu	Thr	Gln
Asp 145	Pro	Ala	Val	Ser	Val 150	Ala	Leu	Gly	Gln	Thr 155	Val	Arg	Ile	Thr	Cys 160
Gln	Gly	Asp	Ser	Leu 165	Arg	Ser	Tyr	Tyr	Ala 170	Ser	Trp	Tyr	Gln	Gln 175	Lys
Pro	Gly	Gln	Ala 180	Pro	Val	Leu	Val	Ile 185	Tyr	Gly	Lys	Asn	Asn 190	Arg	Pro
Ser	Gly	Ile	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Ser	Ser	Gly	Asn	Thr	Ala

200 205 195

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1727

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1727

Gln Val Gln Leu Val Gln Ala Gly Ala Asp Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35  $\phantom{-}40\phantom{+}45\phantom{+}$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100 105 110

Asp Tyr Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Arg Asn Asn Arg 180 185

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Val Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1728

<211> 248

<212> PRT <213> Homo sapiens

<400> 1728

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Arg Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr.  $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \ \ 105 \ \ 110$ 

Asp Tyr Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr 130 135 140

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 150 155 160

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 170 175

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1729

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1729

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr 20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Asp Ala Phe Asp  $100 \,$   $105 \,$   $110 \,$ 

Ile Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln 130 135 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys  $145 \hspace{1.5cm} 150 \hspace{1.5cm} 155 \hspace{1.5cm} 160$ 

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys  $165 \ \ \, 170 \ \ \, 175$ 

Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys Arg Pro  $180 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr 210 215 220

Cys His Ser Arg Asp Ser Ser Gly Asn His Val Leu Phe Gly Gly Gly 225 230 235

Thr Lys Leu Thr Val Leu Gly 245

<210> 1730

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1730

Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Asn Lys Pro Gly Ala 1  $\phantom{-}$  10  $\phantom{-}$  15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr 20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu Glu Trp Met 35 40 45

Gly Trp Ile Asn Ala Gly Asn Gly Asn Thr Asn Tyr Ser Gln Asn Phe 50

Gln Asp Arg Val Ser Ile Thr Arg Asp Thr Ser Ala Asn Thr Val Tyr  $_{65}$   $\phantom{0}$  75  $\phantom{0}$  80

Met Glu Leu Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Gly Tyr Tyr  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Met Asp Val Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu 130 135 140

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile 145 150 155 160

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln  $165 \hspace{1cm} 170 \hspace{1cm} 175 \hspace{1cm}$ 

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asp Asn 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1731

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1731
Glr Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val '35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Arg Leu Glu Tyr Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr  $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$ 

Tyr Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser 115 \$120\$

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 130 140

Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr 145 150 150 155 ' 160

Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn 165 170 175

Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala  $180 \,$ 

Lys Asn Lys Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser 195  $\phantom{\bigg|}200\phantom{\bigg|}$  205

Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val 225 230 235 240

Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly  $245 \ \$ 

<sup>&</sup>lt;210> 1732

<sup>&</sup>lt;211> 248

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

<400> 1732															
Gln 1	Val	Gln	Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ser
Ser	Val	Lys	Va1 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Gly	Thr	Phe	Ser 30	Ser	Tyr
Ala	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	G1y	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Gly 50	Ile	Ile	Pro	Ile	Phe 55	Gly	Thr	Ala	Asn	Tyr 60	Ala	Gln	Lys	Phe
G1n 65	G1y	Arg	Va1	Thr	Ile 70	Thr	Ala	Asp	Glu	Ser 75	Thr	Ser	Thr	Ala	Tyr 80
Met	G1u	Leu		Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Met	G1u 100	Tyr	Asp	Ile	Leu	Thr 105	Gly	Tyr	Tyr	G1y	Gly 110	Tyr	Phe
Asp	Tyr	Trp 115	G1y	Arg	Gly	Thr	Leu 120	Val	Thr	Val	Ser	Ser 125	Gly	Gly	Gly
Gly	Ser 130		Gly	G1y	Gly	Ser 135	Gly	Gly	G1y	G1y	Ser 140	Ser	G1u	Leu	Thr
Gln 145		Pro	Ala	Val	Ser 150	Va1	Ala	Leu	G1y	Gln 155	Thr	Va1	Arg	I1e	Thr 160
Cys	G1n	Gly	Asp	Ser 165	Leu	Arg	Ser	Tyr	Tyr 170		Ser	Trp	Tyr	G1n 175	Gln
Lys	Pro	Gly	G1n 180	Ala	Pro	Va1	Leu	Va1 185	I1e	Tyr	G1y	Lys	Asn 190	Asn	Arg
Pro	Ser	Gly 195	I1e	Pro	Asp	Arg	Phe 200	Ser	G1y	Ser	Ser	Ser 205	Gly	Asn	Thr
Ala	Ser 210		Thr	Ile	Thr	G1y 215		Gln	Ala	Glu	Asp 220	G1u	A1a	Asp	Tyr
Tyr 225		His	Ser							His	Val	Leu	Phe		G1y 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1733

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1733

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \ \ 40 \ \ 45$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 60$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr  $65 \hspace{1cm} 70 \hspace{1cm} 75 \hspace{1cm} 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met 130 135 140

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser 180 185 190

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 215

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 230

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1734

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1734

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 55 60 50

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 105 110

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly 115 120 125

Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Ser Glu Leu Thr

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 155 150 2031

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 170 165 Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg 180 Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 200 195 Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 235 240 225 230 Gly Thr Lys Leu Thr Val Leu Gly <210> 1735 <211> 254 <212> PRT <213> Homo sapiens <400> 1735 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly 5 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Gly Tyr 20 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 40 35 Ala Ser Val Arg Asn Asp Gly Ser Asn Thr Tyr Tyr Thr Asp Ser Val 55

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90  $95^{\circ}$ 

Ala Lys Ser Gln Ser Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr Tyr 100 \$105\$

Tyr Gly Met Asp Val Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser 115 120 125

- Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145  $\,$  150  $\,$  155  $\,$  160
- Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175
- Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205
- Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225  $\phantom{\bigg|}230\phantom{\bigg|}235\phantom{\bigg|}235\phantom{\bigg|}$
- Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250
- <210> 1736
- <211> 251
- <212> PRT
- <213> Homo sapiens
- <400> 1736
- Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15
- Ser Val Lys Val Ser Cys Lys Ala Ser Asp Tyr Thr Phe Thr Ser Tyr
  20 25 30
- Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$
- Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu 50 55 60
- Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr  $65 \phantom{000} 70 \phantom{000} 75 \phantom{000} 75$

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 90 Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 105 100 Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 155 150 145 Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser 170 Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 215 210 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 250 245 <210> 1737 <211> 248 <212> PRT <213> Homo sapiens <400> 1737 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 15 10 5

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
'35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 . 90 95

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe  $100 \\ 105 \\ 110$ 

Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 \$120\$

Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr 145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala Trp Tyr 165 170 175

Gln Gln Lys Pro Gly Arg Ala Pro Lys Val Leu Ile Tyr Lys Ala Ser  $180 \,$   $185 \,$   $190 \,$ 

Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly 195 200 205

Thr Asp Phe Thr Leu Thr Tle Ser Ser Leu Gln Pro Glu Asp Phe Ala 210 \$215\$

Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys Arg 245

<210> 1738

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1738															
			Leu	Val 5	Gln	Ser	Gly	Ala	Glu 10	Val	Lys	Lys	Pro	Gly 15	Ala
Ser	Val	Lys	Val 20	Ser	Cys	Lys	Ala	Ser 25	Gly	Tyŗ	Thr	Phe	Thr 30	Ser	Tyr
Gly	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	Gly	Gln	Gly	Leu 45	Glu	Trp	Met
Gly	Trp 50	Ile	Ser	Ala	Tyr	Asn 55	Gly	Asn	Thr	His	Tyr 60	Ala	Gln	Lys	Leu
Gln 65	Gly	Arg	Val	Thr	Met 70	Thr	Thr	Asp	Thr	Ser 75	Thr	Ser	Thr	Ala	Tyr 80
Met	Glu	Leu	Arg	Ser 85	Leu	Arg	Ser	Asp	Asp 90	Thr	Ala	Val	Tyr	Tyr 95	Cys
Ala	Arg	Met	Glu 100	Tyr	Asp	Ile	Leu	Thr 105	Ser	Tyr	Tyr	Gly	Gly 110	Tyr	Phe
Asp	Tyr	Trp 115	Gly	Gln	Gly	Thr	Met 120	Val	Thr	Val	Ser	Pro 125	Gly	Gly	Gly
Gly	Ser 130	Gly	Gly	Gly	Gly	Ser 135	Gly	Gly	Gly	Gly	Ser 140	Gln	Ser	Val	Leu
Thr 145	Gln	Pro	Ala	Ser	Val 150	Ser	Gly	Ser	Pro	Gly 155	Gln	Ser	Ile	Thr	Ile 160
Ser	Cys	Thr	Gly	Thr 165	Ser	Ser	Asp	Val	Gly 170	Gly	Tyr	Asn	Tyr	Val 175	Ser
Trp	Tyr	Gln	Gln 180		Pro	Gly	Lys	Ala 185	Pro	Lys	Leu	Met	Ile 190	Tyr	Glu
Gly	Ser	Lys 195		r Pro	Ser	Gly	Va1 200		Asr	Arg	r Phe	Ser 205	Gly	Ser	Lys
Ser	Gly 210		Thr	: Ala	. Ser	Leu 215	Thr	Ile	Ser	Gly	220	Gln	Ala	Glu	Asp
Glu	Ala	Asr	туг	Tyr	Cys	Ser	Ser	Tyr	Thi	Thr	Arg	Ser	Thr	Arg	Val
225		-		-	230					235	5				240

203€

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1739 <211> 254

<212> PRT <213> Homo sapiens

<400> 1739

Gly Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ile Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn  $\phantom{\bigg|}20\phantom{\bigg|}25\phantom{\bigg|}25\phantom{\bigg|}$ 

Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Ser Gln Ser Asp Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr 100 105 110

Tyr Gly Met Asp Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln  $130\,$ 

Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser 145  $\phantom{000}$  150  $\phantom{000}$  155  $\phantom{000}$  160

Ile Thr Val Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn 165 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met 180 . 185 190

Ile Tyr Glu Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser 195 200 205

Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser 225 230 235 240

Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly

<210> 1740

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1740

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Asn 20 25 30

Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  $_{65}$   $\phantom{0}70$   $\phantom{0}75$ 

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys \$85\$ 90 95

Ala Lys Ser Gln Ser Asn Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr Tyr Tyr 100 105 110

Tyr Gly Met Asp Val Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser 130 135 140

Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Arg Thr Val  $145 \\ 150 \\ 150 \\ 160$ 

Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp 165 170 175

Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys  $180 \,\,$ 

Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser 195 200 205

Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu 210 215 220

Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val 225 230 235

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1741

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1741

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ . 40 \$45\$

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe  $50 \hspace{1cm} 60$ 

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Met Glu Tyr Asp Ile Leu Thr Gly Tyr Tyr Gly Gly Tyr Phe 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr 145 \$150\$

Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln 165 \$170\$

Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg  $180 \\ 185 \\ 190$ 

Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr 195 200 205

Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly Gly 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1742

<211> 242

<212> PRT

<213> Homo sapiens

<400> 1742

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr 20 25 30

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$ 

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asp Tyr Ala Gln Lys Leu 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 65 70 75 80

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$ 

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 120 125

Ser Gly Gly Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser 130 140

Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys Arg Gly Asp Ser Leu 145 \$150\$ 155 \$160

Arg Ser Tyr Tyr Thr Asn Trp Phe Gln Gln Lys Pro Gly Gln Ala Pro 165 170 175

Leu Leu Val Val Tyr Ala Lys As<br/>n Lys Arg Pro Ser Gly Ile Pro Asp $180 \\ 180 \\ 185 \\ 190$ 

Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr 195 200 205

Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp 210 . 215 220

Ser Ser Gly Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val 225 230 235 240

Leu Gly

<210> 1743

<211> 245

<212> PRT

<213> Homo sapiens .

<400> 1743 Ghn Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Ala Thr Phe Ser Ser His

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Gly	Ile	Ser 35	Trp	Val	Arg	Gln	Ala 40	Pro	G1y	Gln	Gly	Leu 45	G1u	Trp	Met
Gly	Gly 50	Ile	Ile	Pro	Ile	Phe 55	Gly	Thr	Ala	Asn	Tyr 60	Ala	Gln	Lys	Leu
Gln 65	Gly	Arg	Val	Thr	I1e 70	Thr	Ala	Asp	Glu	Leu 75	Thr	Arg	Thr	Va1	Tyr 80
Met	Asp	Leu	Ser	Ser 85	Leu	Arg	Ser	Glu	Asp 90	Thr	Ala	Va1	Tyr	Tyr 95	Cys
		į.	Met 100					105					110		
		115					120					125			Gly
	130		Gly			135					140				
145			Pro		150					155					160
			Gly	165					170					175	
Gly	Lys	Ala	Pro 180	Lys	Leu	Met	Ile	Tyr 185	Glu	. Gly	ser	Lys	Arg 190	Pro	Ser

Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser 200

205

Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 220 215

Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys 235 240 230

Leu Thr Val Leu Gly 245

195

<210> 1744

<211> 247

<212> PRT

<213> Homo sapiens

<400> 1744 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Ser Tyr 2.0 Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Leu Pro Ile Phe Gly Pro Ala Arg Tyr Ala Glu Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 70 65 Met Glu Leu Lys Thr Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ala Gly Thr Ser Leu Met Asn Tyr Gly Thr Asp Val Trp Gly 100 Lys Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly 120 125 115 Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 135 130 Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 150 Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165 170 His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 185 190 Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr 200 205 Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 235 - 240 230 2043

Thr Lys Leu Thr Val Leu Gly 245

<210> 1745 <211> 256

<212> PRT <213> Homo sapiens

<400> 1745

Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Glu 1 5 10

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly  $20 \ 25 \ 30$ 

Asn Tyr Tyr Trp Ser Trp Val Arg Gln His Pro Gly Lys Gly Leu Glu 35 40 45

Trp Ile Gly Tyr Ile Tyr Asp Ile Gly Asn Thr Tyr Asn Pro Ser Leu 50 60

Lys Ser Arg Val Thr Met Ser Val Asp Thr Ser Lys Asn Gln Phe Ser 65 70 75 80

Leu Glu Leu Thr Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Val Pro Tyr Tyr Tyr Asp Thr Ser Gly Gly Tyr Leu Gly Glu 100 105 - 110

Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val 115 120 125

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 130 135

Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly 145 150 155

Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly 165 \$170\$

Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys  $180 \ \ 185 \ \ 190 \ \$ 

Leu Met Ile Tyr Glu Gly Ser Lys Trp Pro Ser Gly Val Ser Asn Arg 195 200 -

Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly

Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr 225

Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1746

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1746

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Ser Tyr 2.5 2.0

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35

Gly Gly Ile Leu Pro Ile Phe Gly Pro Ala Arg Tyr Ala Glu Lys Phe 50

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 70

Met Glu Leu Lys Thr Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys 85

Ala Arg Ala Gly Thr Ser Leu Met Asn Tyr Gly Thr Asp Val Trp Gly 105 100

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 125 115 120

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala. 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 160 145 150 155

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln 165  $$170\$ 

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr \$195\$ 200 205

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly 245

<210> 1747 <211> 251

<212> PRT

<213> Homo sapiens

<400> 1747

Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \\ 25 \\ 30$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 55 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100\,$  ,  $\,$   $\,$  105  $\,$  110

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Val Thr Ile 145  $\phantom{000}150\phantom{000}$ 

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser  $165 \hspace{1cm} 170 \hspace{1cm} 175$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 180 185 190

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Pro Gln Ala Glu Asp 210 215 220

Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1748

<211> 249

<212> PRT

<213> Homo sapiens

<400> 1748

Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn Asn 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$ \$40\$

Gly Gly Ile Ile Pro Met Phe Gly Thr Ala Lys Tyr Ser Gln Asn Phe  $50 \ \ 60$ 

Gln Gly Arg Val Ala Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Ser  $65 \ 70 \ 75 \ 80$ 

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Ser Arg Asp Leu Leu Leu Phe Pro His Tyr Gly Met Asp Val  $100 \ \ 105 \ \ \ 110$ 

Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Ser 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln  $130 \ \ \, 135 \ \ \, 140$ 

Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser I1e Thr Ile Ser Cys 145  $\phantom{00}$  150  $\phantom{00}$  155  $\phantom{00}$  160

Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr  $165 \\ 170 \\ 175$ 

Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Gly  $180 \,$   $185 \,$   $190 \,$ 

Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly 195  $\phantom{\bigg|}200\phantom{\bigg|}$ 

Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu G1n Ala G1u Asp G1u Ala 210 215 220

Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly 225 230 235

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<210> 1749

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1749 Gin Val Gin Leu Gin Gin Ser Gly Ala Glu Val Lys Arg Pro Gly Ala 1 5 10 15

Ser Val Val Val Ser Cys Lys Ser Ser Gly Tyr Thr Phe Thr Lys Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe 50 60

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys 85 90 95

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe 100 105 110

Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu 130 135 140

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145 \$150\$

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser  $165 \\ 170 \\ 175$ 

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu  $180 \hspace{1cm} 185 \hspace{1cm} 190 \hspace{1cm}$ 

Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys \$195\$

Gly Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val 225 230 235 240

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250

<210> 1750

<211> 245

<212> PRT

<213> Homo sapiens

<400> 1750 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Thr Tyr 20 25 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Met Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr 70 75 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly 100 105 110 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly 115 Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala Ser Val 130 135 140 Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser 145 Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro 165 170 175 Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg Pro Ser 180 185 Gly Ala Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser 195 200

Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys 210 215 220

Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Glu 230 235 240

Leu Thr Val Leu Gly 245

<210> 1751 <211> 247

<211> 247 <212> PRT

<213> Homo sapiens

<400> 1751

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met  $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm} .$ 

Gly Gly Ile Leu Pro Ile Phe Gly Thr Ala Lys Tyr Ala Glu Lys Phe 50 55 60

Glu Asp Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Ala Tyr 65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Gly Ser Ser Leu Met Thr Tyr Gly Thr Asp Val Trp Gly 100 105 110

Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly 115 120 125

Gly Gly Ser Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro Ala 130 135 140

Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly 145 150 150 155 160

Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Arg Gln  $165 \,$   $170 \,$   $175 \,$ 

His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys Arg 180 185 190

Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr

Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr 210 215 220

Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly 225 230 235 240

Thr Lys Leu Thr Val Leu Gly

<210> 1752

<211> 251 <212> PRT

<213> Homo sapiens

<400> 1752

Glu Met Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr
20 25 30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met 35 40 45

Gly Trp Ile Asn Gly Gly Ser Gly Asp Thr Lys Tyr Ser Arg Lys Phe  $50 \hspace{1cm} 55 \hspace{1cm} 50 \hspace{1cm} 60 \hspace{1cm}$ 

Gln Gly Arg Val Thr Ile Thr Lys Asp Thr Ser Ala Ser Ala Ala Tyr 65 70 75 80

Met Glu Leu Ser Ser Leu Gly Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Ala Arg Ala Thr Tyr Asp Pro Leu Thr Gly Tyr Ser Phe Asp Gly Phe  $100 \\ 105 \\ 110$ 

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile 145  $\phantom{00}$  150  $\phantom{00}$  155  $\phantom{00}$  160

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser . 170 165 - Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu 185 Gly Ser Lys Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys 195 200 Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp 210 Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly 245 250 <210> 1753 <211> 249 <212> PRT <213> Homo sapiens <400> 1753 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 10 . 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Ser Tyr 20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met \$35\$

Gly Arg Ile Ile Pro Ile Gly Asn Met Ala Asn Tyr Ala Gln Lys Phe 50 60

Gln Gly Arg Val Thr Leu Thr Ala Asp Lys Ser Thr Gly Thr Ala Tyr 65 70 75 80

Met Glu Leu Thr Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$ 

Ala Arg Glu Asn Tyr Asp Tyr Leu Thr Gly Tyr Tyr Gly Ala Phe Asp  $100 \,$   $105 \,$   $110 \,$ 

Ile Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly 115 120 . 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr

Gln Pro Ala Ser Val Ser Val Ala Leu Gly Gln Thr Val Thr Ile Ser 145 150 155 160

Cys Thr Glu Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln \$165\$

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Val Tyr Ala Lys Asn Asn 180 185 190

-Arg Pro Ser GHy Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn 195  $200 \,$  205

Ala Ala Ser Lèu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly 225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly 245

<211> 245

<212> PRT ---

<213> Homo sapiens

<400> 1754

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr  $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$ 

Ala Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met 35 . 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Leu 50 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Tyr
65 70 75 80

Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Thr Gly Met Gly Asp His Tyr Gly Met Asp Val Trp Gly Arg Gly  $100 \ \ 105 \ \ 110$ 

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly 115 120 125

Ser Gly Thr Pro Gly Gln Arg Val Thr Ile Ser Cys Ser Gly Ser Ser 145 150 150 160

Ser Asn Ile Arg Ser Asn Thr Val Asn Trp Tyr Gln Arg Leu Pro Gly
165 170 175

Ala Ala Pro Gln Leu Leu Ile Tyr Asn Asn Asp Gln Arg Pro Ser Gly
180 185 190

Ile Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Gly Ser Leu 195 200 205

Val Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala 210 215 220

Ser Trp Asp Asp Ser Leu Asn Gly Arg Val Phe Gly Gly Gly Thr Lys  $225 \hspace{1.5cm} 230 \hspace{1.5cm} 235 \hspace{1.5cm} 240$ 

Leu Thr Val Leu Gly 245

<210> 1755

<211> 248 <212> PRT

<213> Homo sapiens

<400> 1755 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Lys Tyr 20 25 30